	# *NX-5400* *02 type* *Operation Manual*	
		2005-04-06

CONTENTS

ATTENTION **1**

I. INTRODUCTION **2**

II. INSTALLATION **3**

Replacing Paper Rolls 4

Replacing the Ribbons 4

III. DISPLAY **5**

IV. KEY LAYOUT **6**

V. OPERATION SEQUENCES **12**

1. Clerk Sign-on / Sign-off 12
2. Clerk Interrupt System 13
3. PLU 15

User Friendly PLU Programming in R position 16

a) Manual Price Entry 17

b) Repetition 17

c) Multiplication 17

d) Split Pricing 18

e) Square Entry (Measurement Calculation) 18

f) Price Shift 19

g) Menu Shift 19

h) Link PLU 20

i) Simple Condiment PLU 21

j) PLU Modifier 22

k) Single Item 23

l) Cooking Message & PLU Supplementary Message 24

4. Kitchen Printer 25
5. Media Closing 27
6. Tray Subtotal 28
7. Foreign Currency / Euro Currency 29

a) Closing Methods 29

b) Currency Exchange 29

c) Euro Currency System 30

8. Cheque Cashing / Cheque Printing 32

a) Cheque Cashing 32

b) Cheque Printing on Slip Printer (TP-620) 32

9. Tip Operation 33

a) Tip Amount Input 33

b) Change Kept As Tip 33

10. Mark-up / Mark-down 34
11. Adjustment (Automatic % on Specific Items) 35
12. Amount Plus / Amount Discount 36
13. Last Item Correction 37
14. Void 38
15. Transaction Void 39
16. Refund / Media Refund 40
17. Tax 42
18. R/A (Received on Account) 44
19. P/O (Paid Out) 44
20. No Sale 44
21. Off Compulsory 45
22. Number of People 45
23. Message 46
24. Validation / Slip Validation 47
25. Arrangement 48
26. Recall 49
27. Simple Track System - Item Track or Amount Track 50

- Track Number Entry Method -- Manual Track Number Method 51
- Clerk Track Assignment Methods 51

1) Free Clerk Track Assignment [SF-16.a=0] 51
2) Clerk Track Assignment in Registration [SF-16.a=1] 51

- Track Operation Sequences 51

A. Item Track System [SF-15.c=0] 52
a) Opening a New Track & Closing Temporarily 52
b) Picking Up a Track & Closing a Track Finally 55
c) Track Transfer to a Designated Track 58
d) Track Balance Calculation (display only) 59
B. Amount Track System [SF-15.c=1] 60

28. Previous Balance Plus (PB+) / Previous Balance Minus (PB-) 62
29. Ticket System 63
a) Real-Time Ticket Sample 64
b) After Closing Ticket Sample 65
c) Mixed Ticket Sample (two kinds of combined ticket) 66
d) Multiple Ticket Sample 67
e) Other Notes for Ticket 68
30. Cash Declaration 69

VI. TRAINING 70

VII. PRINT CONTENTS 71
1. Journal Print Contents 71
2. Receipt / Slip Print Contents 71
3. Post-Receipt 71

VIII. REPORTS 72
REPORT SEQUENCE 72
Required # for Individual Function Program Dump (X-85) 74

IRC REPORTS 75

TRANSACTION REPORT SAMPLES 77

IX. WARNING MESSAGES 84

THE SOCKET-OUTLET SHALL BE INSTALLED NEAR THE EQUIPMENT AND SHALL BE EASILY ACCESSIBLE.

LA PRISE DOIT ETRE PRES DE L'APPAREIL ET FACILE D'ACCES.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help.

Notes ==========

1. The contents of this manual are subject to change without notice.
2. We cannot be held responsible if other products, which are not approved by us, are used for options or expendable supplies.

==========

ATTENTION

Thank you very much for purchasing this Electronic Cash Registers. This ECR has many programmable features, hardware combinations and options. Please consult your dealer as to your particular requirements, as this ECR can be configured, through both hardware and software (programming) to suit a variety of different applications.

Please fill in the information requested below:

MODEL : _____

SERIAL No.: _____

DATE OF PURCHASE: _____

YOUR DEALER
(WHERE PURCHASED): _____

Phone/Fax/Address: _____

_____

_____

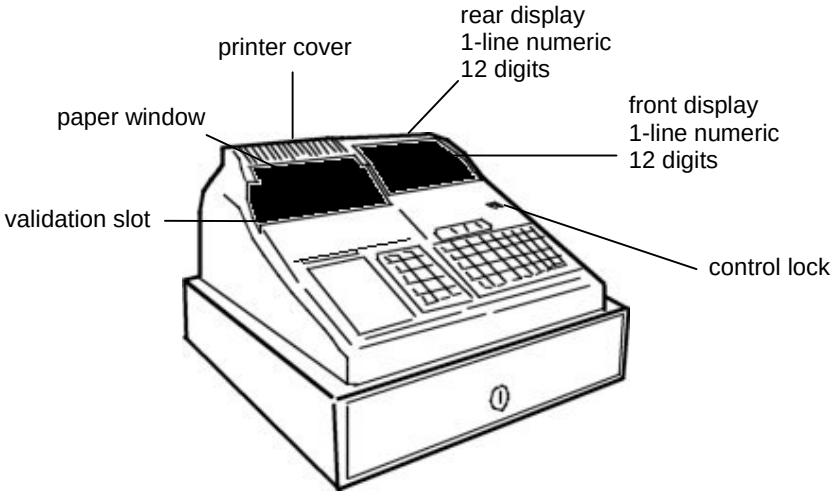
I. INTRODUCTION

This ECR is Hospitality POS terminals for Restaurants, Bars / Pubs and Quick Service having a lot of functions like scanning system, clerk interrupt system and Inter Register Communication, and so on as follows;

Major Features

- Scanning system with 14 digits random PLU code having 18 digits PLU descriptor
- Standard 1570 PLUs, Max. 21666 PLUs
- User friendly PLU programming in SP & R positions
- 64 group-As, 25 group-Bs and 10 main group-As
- Clerk interrupt with 26 clerks or Simple track system
- Simple Track System - 30 item tracks or 30 amount tracks
- Transaction Void
- Simple Condiment PLU
- Euro Currency System
- Tray Subtotal Tendering
- ESF memory
- Ticketing Function
- 5 Media Keys + 4 Preset Tender Keys
- 4 Arrangement Keys (50 key steps)
- PC Batch Communication, Programming Module PLM 2000
- IRC (Inter Register Communication)
    - 8 ECRs
    - 4 kitchen printers TP-420/422/522/722, CBM-233/1000 via NA-710/730
    - 4 slip printers TP-620
    - PC communications with Tensai2000

II. INSTALLATION



Unpacking

Check the contents for obvious physical damage.

Suggestions for installation

1) The ECR should not be installed in extremely hot or cold places, or places which are exposed to direct sunlight for extended periods of time.
2) The ECR should not be installed where it may come into contact with excessive dust.
3) The ECR should not come into contact with liquid.

Check the following before using ECR

1) The required peripheral(s) has (have) been connected to the correct interface connector(s);
2) The power plug is connected to the AC outlet;
3) The control key is turned to the appropriate position;
4) The appropriate number of paper roll(s) is (are) fitted.

If EE-99 is displayed

It indicates that ECR data might be collapsed because of a low battery condition by battery discharge while ECR is in stock for a long period. Perform Physical RAM Test and Auto Preset, then leave ECR ON for minimum of 3 hours for battery charge. Contact your distributor for the steps.

When you connect / disconnect the cable for the peripheral, make sure that the AC cord is disconnected.

Replacing Paper Rolls

Regarding terminal printers, refer to the respective printer's User's Manual.

a) Lift the printer cover.

b) **Removing old paper:**
Press the receipt or journal paper feed key to feed the remaining paper through the printer or push the green paper release lever towards the paper roll bed and pull the paper through the printer. **DO NOT** force paper through the printer as this may result in damage to the printer mechanism or cause a paper jam.

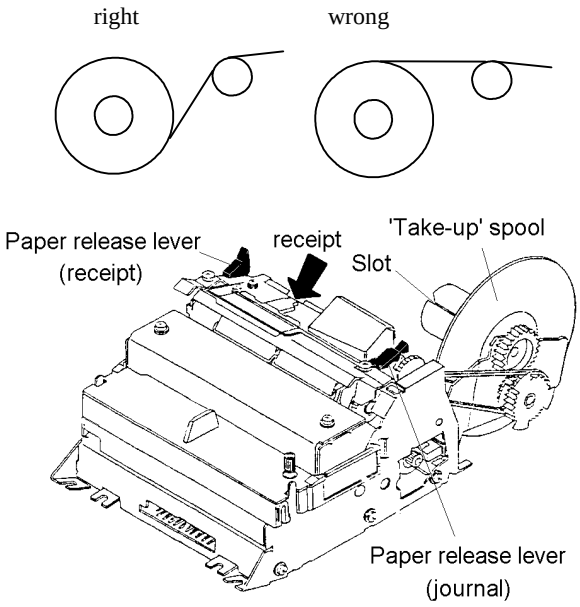
c) **Inserting new paper:**
Place the new paper in the correct position on the printer's paper roll bed.

d) Make sure that the leading edge of the new paper roll is cut **straight** across.

e) Set the paper release lever and insert the leading edge into the printer slot.

f) In order to feed the paper, press the paper feed key to the roll you are replacing.

g) In the case of the journal paper, insert the loose end of the paper tightly to the slot of journal 'take-up' spool.



fine quality paper roll
44.5 mm x ø83 mm

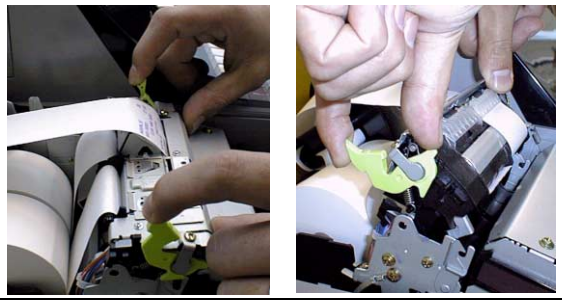
< When paper jammed inside the paper guide >

a) Raise the paper guide by lifting both paper release levers.

b) Remove the jammed paper by hand.

c) Close the paper guide.

d) Then, with both hands, gently press down both sides of the paper guide.



Replacing the Ribbons

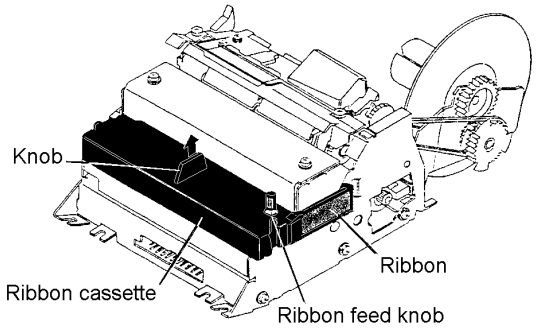
INK RIBBON: ERC-32 (Epson)

a) Lift the printer cover and remove the old ribbon.

b) Turn the ribbon feed knob to stretch tight.

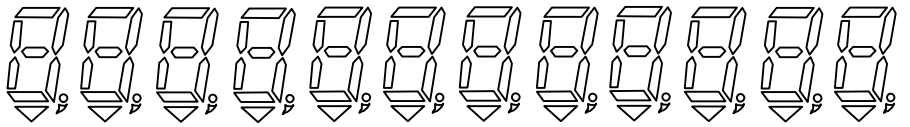
c) While tilting the ribbon cassette forward slightly, insert the ribbon between the print head and the paper; push the ribbon cassette firmly into place.

d) Turn the ribbon feed knob once more to stretch tight the ribbon.



III. DISPLAY

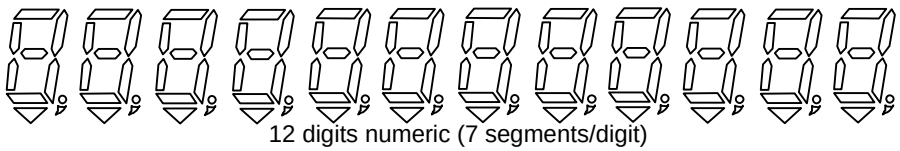
FRONT DISPLAY



REG | 2nd PRICE | 2nd MENU | 3rd MENU | # | % | +/- | VD/RF | PO/RA | R-OFF | SUB TOTAL | TOTAL

12 digits numeric (7 segments/digit)

REAR DISPLAY



12 digits numeric (7 segments/digit)

LAMP	CONDITION	MEANING
REG	ON	registration mode (clerk assignment condition) comma is lit for PLU modify 1 mode
	FLASHING	training mode
2nd PRICE	ON	2nd price mode (price shift) comma is lit for PLU modify 2 mode
	FLASHING	ESF memory near full
2nd MENU	ON	2nd menu mode (menu shift 1) comma is lit for PLU modify 3 mode
	FLASHING	ESF memory near full
3rd MENU	ON	3rd menu mode (menu shift 2)
	FLASHING	ESF memory near full
#	ON	input of alphanumeric message
	FLASHING	input of message in lower-case characters
%	ON	mark-up/down operation
+/-	ON	discount operation
	FLASHING	adjustment operation
VD/RF	ON	refund operation
	FLASHING	void operation
PO/RA	ON	received on account operation
	FLASHING	paid out operation
R-OFF	ON	receipt-off condition
TOTAL	ON	payment amount
	FLASHING	recall operation mode

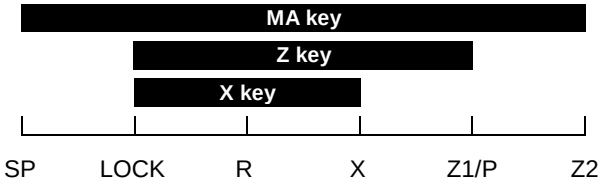
IV. KEY LAYOUT

Stroke Keyboard

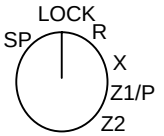
			(BS) ⇧ RPF	(SPACE) ⇧ JPF	(CAPS) TTL VALID.	(SMALL) RECEIPT OFF						
CL	X2/FOR TIME	(DOUBLE) CLERK ID	A 1	F 6	K 11	P 16	U PLU REPEAT	Z CR	- € VOID	& REFUND		
7	8	9	B 2	G 7	L 12	Q 17	V PRICE	Ä ITEM (-)	Ø P/O	* R/A		
4	5	6	C 3	H 8	M 13	R 18	W %1	Ö %2	Σ TTL 1	Å TTL 2		
1	2	3	D 4	I 9	N 14	S 19	X MESSAGE	Ü BUFFER PRINT 1	# TTL 3	/ TTL 4		
0	00	•	E 5	J 10	O 15	T 20	Y NO SALE	Æ SBTL	(ENTER) CASH/TTL 5			

X2/FOR and CLERK ID key names are different from the attached key sheet.

Control key position range:
There are three standard control keys (MA, Z, X).



Flat Keyboard

												61	70	79	88	92	96		
												62	71	80	89	93	97		
												63	72	81	90	94	98	CLERK 1	CLERK 2
												64	73	82	91	95	99	RPF	JPF
1 1	@ 2 6	# 3 11	$ 4 16	% 5 21	Æ 6 26	& 7 31	* 8 36	£ 9 41	Ñ 0 46	€ - 51	Σ 56	65	74	83	CL	X2/FOR TIME	CR	BUFFER PRINT 1	RECEIPT OFF
Q 2	W 7	E 12	R 17	T 22	Y 27	U 32	I 37	O 42	P 47	Ö Ä 52	Ü 57	66	75	84	7	8	9	CLERK ID	PRICE SHIFT
A 3	S 8	D 13	F 18	G 23	H 28	J 33	K 38	L 43	: Ø 48	, 53	← 58	67	76	85	4	5	6	PLU REPEAT	REFUND
4	Z 9	X 14	C 19	V 24	B 29	N 34	M 39	< Å 44	> . 49	? / 54	(BS) 59	68	77	86	1	2	3	SBTL	NO SALE
↑ 5	↓ 10	15	(SPACE) 20	(SPACE) 25	→ 30	35	(DBL) 40	45	(CL) 50	55	(ENTER) 60	69	78	87	0	00	•	TTL 1	CASH TTL 5

KEY EXPLANATION

ADJUSTMENT 1, 2, 1 & 2	Automatic % Discount/Surcharge on Specific Items: Calculates mark-up or mark-down on the subtotal amount of items which have been preprogrammed as one of adjustable 1, 2 or 1 & 2 item. Note that adjustment does not affect PLU sales memory which is shown on the reports.
ARRANGEMENT 1 ~ 4	Performs sequences of programmed steps (up to 50-key steps). Useful for 1-key operations such as fixed sales or report-takes.
BALANCE CALCULATION	Shows the balance and calculates the total of multiple tracks and displays their combined total. Also, the balance can be divided; for example, between the number of customers.
BILL CANCEL	Releases the compulsory condition of a check-out bill issue for Item Track System.
BUFFER PRINT 1 / 2	- **BUFFER PRINT 1** key prints a post-receipt / bill (only the most recently registered contents) including VAT data on a receipt in the receipt-off condition or on a slip when the ECR is programmed for use with a slip printer while **BUFFER PRINT 2** key prints a post-receipt / bill without VAT data. However, the add-on tax data is printed. - **BUFFER PRINT** keys are used to print an Item Confirmation Receipt in Clerk Interrupt System. - The second receipt issue by **BUFFER PRINT** keys is available by programming when the ECR is <u>not</u> programmed for use with a slip printer. - Used for the manual line finder when the pre-feed line number is entered when using a slip printer.
CHECK-OUT BILL 1 / 2	These keys are used in Item Track System. - **CHECK-OUT BILL 1** key prints the check-out bill with VAT data. - **CHECK-OUT BILL 2** key prints the check-out bill without VAT data. - Also, **CHECK-OUT BILL** keys print the subtotal bill with or without VAT data when the track number is entered or immediately after the track is closed by **NEW BAL.** (New Balance) key.
CL (Clear)	Cancels any information that is entered by ten-key or function key (P/O, R/A, tax shift, etc.) before registration; also clears error conditions.
CLERK ID	Used for clerk sign-on and sign-off when using the secret clerk code system for entry into registration.
COOKING MESSAGE (for manual entry)	- Enters one of supplementary messages 1 ~ 50 as a cooking message prior to a PLU entry. If a number greater than 50 is entered, then the number will be printed. - Enters a cooking message manually prior to a PLU entry. Use the alphabet keys and **ENTER** key to enter the message.
CR (Correction)	Cancels the registration of the last-registered item including function key inputs such as %, amount (-), etc.
(-) (Amount Discount)	Subtracts an amount from the item or subtotal depending on the operation. It is possible to register a preset amount or to override it manually.
F.C. SBTL (Foreign Currency Sbtl)	Displays the subtotal of the foreign currency by the depressions of **F.C. SBTL** key and the foreign currency media key. The subtotal of foreign currency should be displayed whenever the tendering amount in the foreign currency is entered.
HALO RELEASE	Releases PLU HALO (High Amount Lock-Out) and compulsory condition of PLU stock input.
HARD CLERK 1 ~ 15	Signs a clerk on or off without the clerk code entry. Interrupts a clerk when another clerk signs on in Clerk Interrupt System.

HARD COOKING MESSAGE 1 ~ 5 (for one-touch entry)	Registers one of supplementary messages 1 ~ 5 as a cooking message prior to a PLU entry. **Hard Cooking Message 1** key picks up supplementary message #1, **Hard Cooking Message 2** key picks up supplementary message #2 and so on.
HARD PLU 1 ~ 123	Registers a PLU with the preset price directly. **HARD PLU 1** key is used to complete the cash declaration which is used to confirm the cash in drawer at the end of the day.
JPF (Journal Paper Feed)	Advances the journal paper.
MEDIA REFUND	Used if a transaction to be refunded was closed by plural media keys. It is not required to do if the transaction was closed by <u>one</u> media key. The refunded amounts are subtracted from the respective media memory, but they are <u>not</u> memorized in the refund memory.
MENU SHIFT 1 / 2	Shifts or cancels the PLU menu level. Via menu shift, the keyboard can have three different menus. The menu shift remains for one registration, for one transaction or the menu shift remains until the next shift key is pressed by programming.
MESSAGE	Enters an alphanumeric message or digits (up to 19 digits).
MISC. VALIDATION	Prints the item validation and the media validation. The slip validation is available if the ECR is programmed for use with a slip printer.
NET SBTL	Displays the net subtotal amount, not including add-on tax amount but including VAT tax amount. Can be programmed to display and print, or display only.
NEW BAL. (New Balance)	- Temporarily closes a transaction including a track and saves the amount in New Balance memory. - Under Clerk Interrupt System, this key stores a clerk's transaction to Clerk Interrupt Memory.
NO SALE	Used to open the drawer for no sale operations.
OFF COMPULSORY	Releases compulsory conditions of validation, number of people input, message input, etc.
P / O (Paid Out)	Records an amount of money withdrawn from the cash drawer when no customer transaction has taken place.
% 1 ~ % 3	Enters a percentage rate for mark-up or mark-down of an item or the subtotal amount depending on the operation. Manual % rate is prohibited by programming.
PERSON	Enters a number of people (at a table). It is possible to override this number.
PLU MODIFIER 1 ~ 3	Modifies the PLU code or cancels the modifier. Using PLU modifiers, one PLU can be changed to three other PLUs. This can be used for three sizes, kinds, etc. The operation is permitted or prohibited by each PLU programming. Also, it remains for one registration, for one transaction or the modifier remains until the next modifier key is pressed by programming.
PLU / REPEAT	- Used for code-entry PLU registration. Enter PLU code, then press this key. - Repeats registration of the last-registered item.
(+) (Amount Plus)	Adds an amount to the item or subtotal amount depending on the operation. It is possible to register a preset amount or to override it manually.

PB+ / PB- (Previous Balance)	Enters the previous balance manually without using a track. **PB+** is used when the previous balance is positive. **PB-** is used when the previous balance is negative.
PRESET TENDER 1 ~ 4	Enters a preprogrammed tendering amount directly by key depression. The tendering amount is memorized in one of the total key (media) memories selected by programming.
PRICE	Manually overrides the price of a code-entry PLU. This key is not needed to override the price of a hard PLU. Enter a price, press this key, then enter the PLU code and press **PLU/REPEAT** key.
PRICE SHIFT	Shifts or cancels a second PLU price. The price shift remains for one registration, for one transaction or the price shift remains until the next shift key is pressed by programming.
RECALL	Displays the total amount of the last transaction during the current transaction. Recall can be executed only when the last transaction is closed by direct media closing.
RECEIPT OFF	Inhibits receipt printing. However, post-receipt may be issued by pressing **BUFFER PRINT** key.
RPF (Receipt Paper Feed)	Advances the receipt paper.
R / A (Received on Account)	Records an amount of money received into the cash drawer when no customer transaction has taken place.
REFUND	Refunds a previously registered item.
SLIP OFF	Prints slip contents on the receipt before pressing **BUFFER PRINT** key or **CHECK-OUT BILL** keys. Can be used when the ECR is programmed to use a slip printer.
SLIP RELEASE	Moves the slip printer's "slip bed" down in the **R** control key position.
STORAGE	Stores a clerk's transaction to Clerk Interrupt Memory when Clerk Interrupt System is used.
SBTL (Subtotal)	Displays the subtotal amount, including tax. Can be programmed to display and print, or display only. When an add-on tax item is registered, this key is used in combination with **TAX SHIFT** keys to display each taxable subtotal amount.
TABLE #	Table # assignment is available under clerk interrupt system only. However, it does not pick up the transactions. Table # assignment is **not** available for the track system.
TAX (only for add-on tax)	Calculates the add-on tax and prints and displays the tax inclusive subtotal. Used, in combination with **TAX SHIFT** keys, to manually enter an add-on tax amount and for tax exemption.
TAX SHIFT 1 ~ 4	When a VAT item is registered, this key shifts the tax status to the designated tax. When an add-on tax item is registered: - Reverses the tax status. - Allows the taxable subtotal amount to be displayed, in combination with **SBTL** key. - Allows the tax amount to be entered manually, in combination with **TAX** key. - Allows tax exemption by **TAX** key, if permitted by programming.

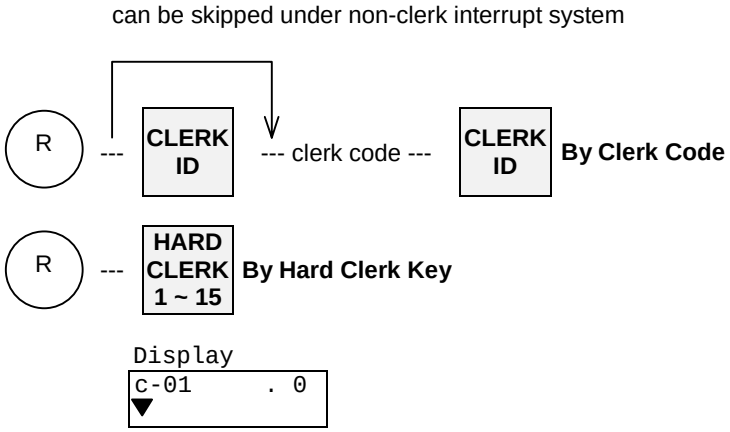
TEN-KEYS (0 ~ 9, 00, 000, .)	For entry of numeric values, percentage rates, PLU codes, report number, programming numbers, etc.
TICKET OFF	Temporarily cancels the ticket condition for one transaction when this key is pressed at the beginning of a transaction in Ticket System.
TIP	Enters a tip amount. Amount can be entered as either an amount separate from payment or as change from over-tendering.
TTL 1 ~ 4, CASH/TTL 5 (media keys)	Closes transactions with or without a tendered amount. - **TTL 1 ~ 4** keys can be programmed as a foreign currency/Euro media/EFT media/Cheque media using the TP-620 slip printer if programmed. - **TTL 5** key is fixed as a local currency media. - **TTL 5** key is used for cash declaration, report printing, track transfer and track consolidation in combination with **NEW BAL.** key. - **TTL 5** key removes the error ECR in IRC communication in the **X** control key position.
TOTAL VALIDATION	Prints the total validation. The slip validation is available if the ECR is programmed for use with a slip printer.
TRACK #	- Assigns a new track. Enter sequential track number 1 ~ 30 and press this key. - Picks up the temporarily closed track by entering track number and pressing this key.
T. VOID (transaction void)	- Executes all the entire registrations in a transaction with **TTL 5** key depression. This is available only <u>before</u> the transaction is closed. - Two-times depression cancels the transaction void.
TRAY SBTL	Prints the total amount of items per purchased customer in a transaction.
VOID	Voids a previously-registered item within the same transaction. If permitted by programming, a negative void operation can be done.
X1	- Used for a square entry (measurement calculation). - Used for a multiple ticket issue.
X2 / FOR / TIME	- Multiplies a PLU or a Preset Tender key that has a preset tendering amount. - Used for a split pricing operation. - Divides track's balance by the number entered. - Displays the time '-HH-MM-SS-'.

V. OPERATION SEQUENCES

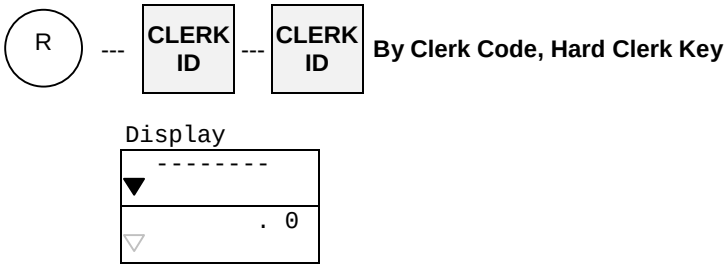
1. Clerk Sign-on / Sign-off

Each clerk should sign on before registration to ensure that sales data in his/her clerk memory is recorded correctly. Even if a clerk does not sign off, when the next clerk signs on, he/she will be automatically signed off.

< Sign-On >



< Sign-Off >



2. Clerk Interrupt System

When the clerk interrupt system is selected by the programming [SF-12.a], even if a clerk is in a middle of registrations, another clerk may interrupt the clerk.

The interrupted clerk's registration contents are stored in his/her clerk's memory and the clerk is automatically signed off. The stored contents are restored by his/her clerk sign-on operation and he/she can continue the registrations.

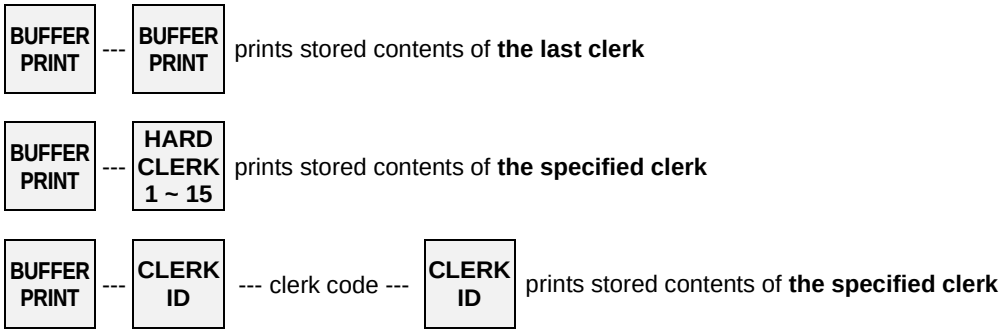
There are the following cases that a clerk's transaction is automatically stored in his/her memory:

- the same **Hard Clerk** key and **Clerk Code** are entered
- the sign-off operation is performed
- other clerk interrupts
- **STORAGE** key or **NEW BAL.** (New Balance) key is pressed
- by the automatic storage timer

Note that the receipt will **not** be printed until the clerk's transaction is closed finally by a media (total) key. Instead of the receipt issue, Item Confirmation Receipt without tax data is issued to check a temporarily stored registration contents.

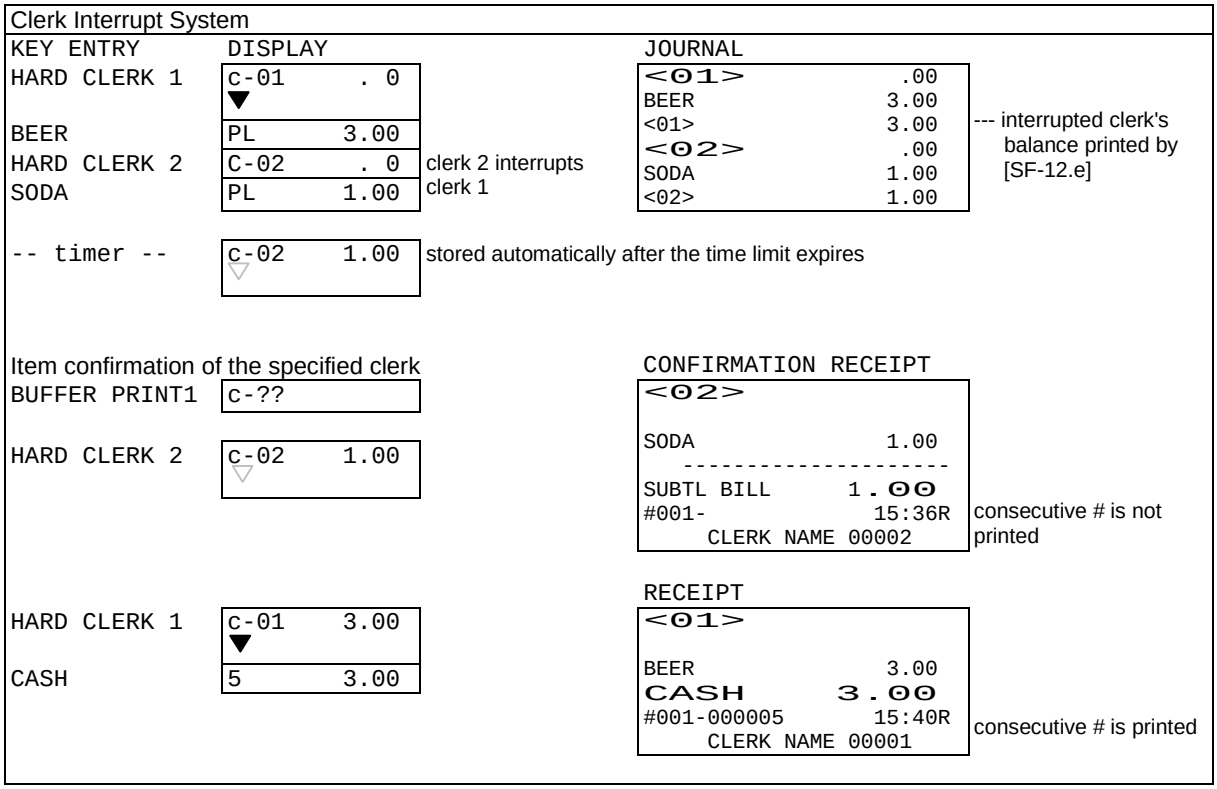
< Item Confirmation >

This is available only when clerk's transaction is stored and if permitted by programming [SF-12.d].
To issue the item confirmation, perform the operation below after the transaction is stored.



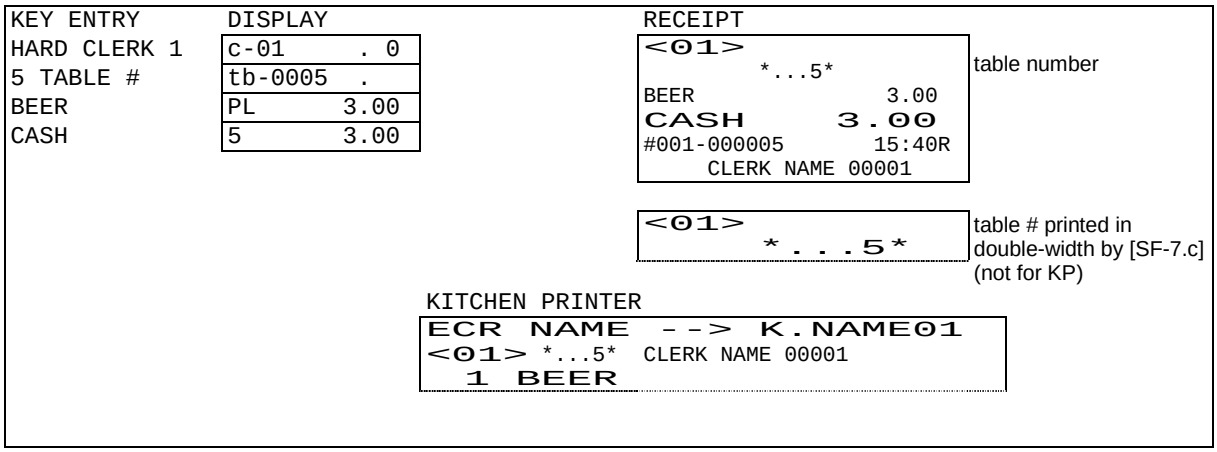
Notes.

- Item Confirmation will not include tax data.
- If an item confirmation is attempted for a clerk with zero balance, press **CL** key in order to reactivate the keyboard.
- If the ECR is programmed for the slip printer, Item Confirmation is printed on the slip printer. If it is required on a receipt, press **SLIP OFF** key first, then perform Item Confirmation operation.
- Table number assignment is available but the track function can not be used.



< Table Number Assignment >

4-digit table number assignment is available only for the clerk interrupt system. However, a transaction pick-up by table number is not allowed.



< Note for Kitchen Printer Items >

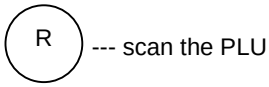
Depending on programming [SF-81.b], items are transmitted to a kitchen printer only when a clerk's transaction is finally closed by a media (total) key or every time when it is interrupted (closed temporarily).

3. PLU

There are three ways to enter a PLU.

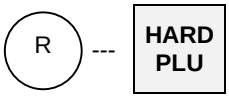
1. **Bar Coded PLUs** which are PLUs programmed to be registered by a scanner.

   Procedure: Scan the bar code labeled on each item while the control key is at the R position.



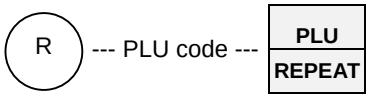
2. **H.PLU keys** are keys which are allocated to the keyboard. Up to 123 keys are available.

   Procedure: Press one of **H. PLU** keys while the control key is at the R position.



3. **Code Entry PLUs** are any PLUs which are not allocated to a key on the keyboard.

   Procedure: Enter the code for the PLU using **Ten-Keys** and then press **PLU** key while the control key is at the R position.



Display & Print Sample of PLU

KEY ENTRY	DISPLAY	RECEIPT
HARD CLERK 1	c-01 . 0 ▼	PLU-NAME 0000000001 1.00
		PLU-NAME 5.00
H.PLU 1	PL 1.00	
scan bar coded PLU	PL 5.00	

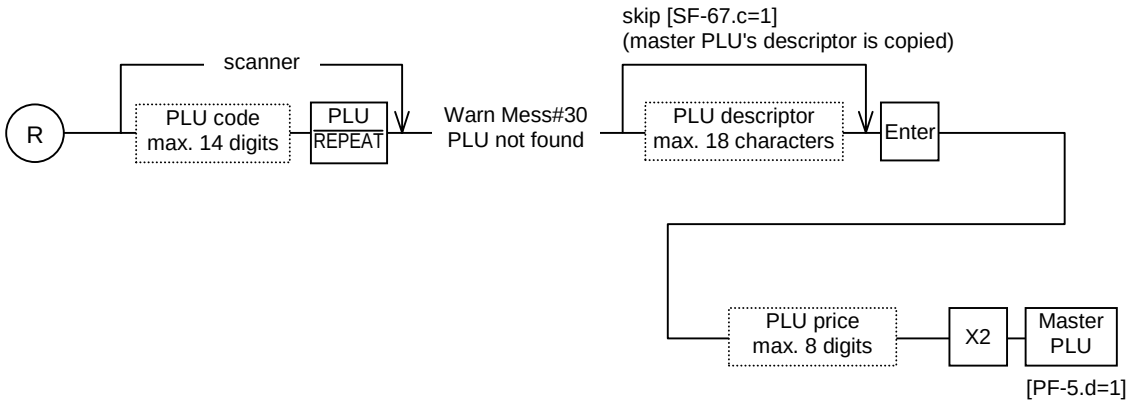
Display & Print Sample of PLU: PLU code displayed and printed by [SF-68.g,h].

KEY ENTRY	DISPLAY		RECEIPT	
HARD CLERK 1	c-01 . 0 ▼		P----------1#	[SF-68.h=1]
			PLU-NAME 0000000001 1.00	
H.PLU 1	PL000001 1.00	[SF-68.g=1]	P--490220103956#	
scan bar coded PLU	20103956 5.00	*	PLU-NAME 5.00	
X2	PL49022010.39			

* Only the last 12 digits of PLU code is shown on the display.
To check the first 10 digits, press **X2** key.

User Friendly PLU Programming in R position

A new PLU having the scanned PLU code can be created in R position if [SF-67.b] is set to 1. All other data (like link group, PLU flag, etc.) will be copied automatically from master PLU and sales data for this PLU will be registered in the newly created PLU sales memory.



* Master PLU's preset data such as link group-A, flag condition, etc. except for link PLU, price and descriptor will be copied to new created PLU. All PLUs can be entered here by scanner, PLU code or H.PLU key.

Following are some samples of PLU operation sequences.

a) Manual Price Entry

A preset price for a PLU may be over-ridden with a manually entered price. Turning the control key to the **X position** may be required by programming [SF-32.h] after the manual price is entered.

Bar Coded PLUs: enter price manually --- (X) if required --- scan the PLU

Hard PLUs: enter price manually --- (X) if required --- **HARD PLU**

Coded PLUs: enter price manually --- (X) if required --- **PRICE** --- enter PLU code --- **PLU** / **REPEAT**

b) Repetition

The last registered PLU, including multiplication, can be repeated. Simply press **REPEAT** key the number of times required immediately after a PLU entry.

KEY ENTRY	DISPLAY	RECEIPT
CARROT CAKE	PL 4.00	CARROT CAKE 4.00
PLU/REPEAT	02 4.00	CARROT CAKE 4.00

c) Multiplication

A PLU may be registered up to 999.999 quantities using **Ten-Keys** and **X2** key.

Bar Coded PLUs: enter the number of items --- **X2** --- scan the PLU

Hard PLUs: enter the number of items --- **X2** --- **HARD PLU**

Direct Multiplication
If programmed by [SF-68.a], Direct Multiplication of a Hard PLU (a multiplication without having to press **X2** key) is possible.

enter the number of items --- **HARD PLU** Manual price entry of a **Hard PLU** key is still made possible by programming [PF-3.a].

Coded PLUs: enter the number of items --- **X2** --- enter PLU code --- **PLU** / **REPEAT**

KEY ENTRY	DISPLAY	RECEIPT
2 [X2]	2. .0	2 X 2.50
BEER	PL 2.50	BEER 5.00

d) Split Pricing

Split pricing can be done by using **X2** key as shown in the sequence below.

enter the loose quantity --- **X2** --- enter the lot quantity --- **X2**

Two bottles of beer are sold from a six-pack.

KEY ENTRY	DISPLAY	
2 [X2]	2. .0	
6	2. .6	
[X2]	.333	-- a
BEER 6 btls	PL 2.20	

RECEIPT

```
2 / 6 X 6.60
BEER <6 btls>      2.20
```

loose quantity / lot quantity X unit price
split price

a: The calculated split quantity is displayed after the lot quantity is entered and **X2** key is pressed.

e) Square Entry (Measurement Calculation)

Square entry can be done by using **X2** key and **X1** key as shown in the sequence below.

enter the ratio to standard width --- **X2** --- enter the ratio to standard length --- **X1**

WRAPPING: 1.00 for width 1 meter and length 1 meter
When the WRAPPING with a measurement of 1.5 m (W) x 1 m (L) is sold

KEY ENTRY	DISPLAY
1.5 [X2]	1.5 .0
1	1.5 .1
[X1]	1.500
WRAPPING	PL 1.50

RECEIPT

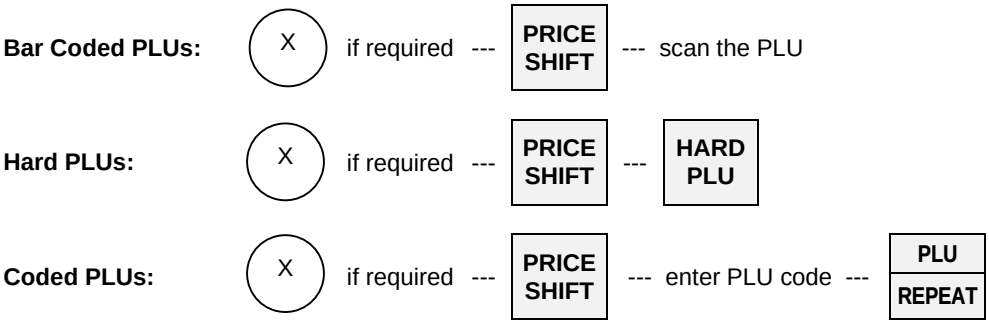
```
1.5 X 1 X 1.00
WRAPPING           1.50
```

1.5: ratio to standard width
1 : ratio to standard length

After pressing **X2** key, a number with a decimal can not be entered for the ratio to standard length.

f) Price Shift

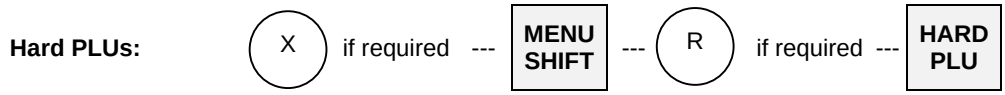
Every PLU can have two prices. One is used for the normal preset price and the other is used for happy hour price, service price, etc.



Note: The 2nd PRICE lamp is lit up when **PRICE SHIFT** key is pressed.
The price shift remains for one registration, for one transaction or until pressing **PRICE SHIFT** key depending on programming [SF-69.e,f].

g) Menu Shift

The hard PLU key layout can be changed to **three** different preprogrammed layouts using two menu shift keys by PGM-111 Menu Layout. Pressing the same menu shift key cancels the menu and pressing an other menu shift key changes the menu.



Note: The 2nd MENU lamp is lit up when **MENU SHIFT 1** key is pressed.
The 3rd MENU lamp is lit up when **MENU SHIFT 2** key is pressed.
The menu shift remains for one registration, for one transaction or until the next shift key is pressed, depending on programming [SF-69.g,h].

h) Link PLU

Every PLU can be linked only one PLU. Each link PLU can have its own link PLU. This is limited to nine link PLUs. When a PLU with a link PLU is registered, the link PLU is also registered automatically and the total amount of the PLU and link PLU will be displayed.

Link PLU has a symbol " ◇ " on the receipt. If the link PLU does not need to be printed, then, "PLU not printed" can be programmed by [PF-1.a] for the PLU. Also, a link PLU itself can be registered. This function is useful for set menu or bottle return operations, etc.

Set Menu: SODA <M> is linked to HOT DOG SET.
POTATO is linked to SODA <M>.

KEY ENTRY	DISPLAY	RECEIPT
HOT DOG SET	PL 7.00	HOT DOG SET 5.00 ◇SODA<M> 1.00 ◇POTATO 1.00

Bottle Link: Bottle is linked to SODA <btl>

KEY ENTRY	DISPLAY	RECEIPT
SODA <btl>	PL .80	SODA <btl> .70 ◇bottle .10

(Note) For bottle return operations, the link PLU itself should be refunded.

Operations for PLU (main PLU) and link PLU are available as follows:

Available on both PLUs	price shift split pricing void refund last item correction mark-up / mark-down % on subtotal adjustment (automatic % on specific items) amount plus / discount on subtotal
Available on main PLUs only	manual price tax shift cooking message mark-up / mark-down % on item amount plus / discount on item ticket item (Ticket setting for the link PLU belongs to the main PLU.)
Available on both PLUs (depending on programming)	single item programmed supplementary message (automatic) kitchen printer transfer (If a different kitchen printer is programmed by main PLU and link PLU, both PLUs will be transmitted to each programmed kitchen printer.)

i) Simple Condiment PLU

Simple Condiment PLU (S.C. PLU) programmed by [PF-4.a] is a PLU printed with condiment mark "□".
It can be entered only with a main PLU. S.C. PLU input is compulsory if programmed by [PF-4.b].

SALAD has been set to Simple Condiment PLU.

KEY ENTRY	DISPLAY	RECEIPT
STEAK	PL 12.00	STEAK 12.00
SALAD	PL 2.00	□SALAD 2.00

Operations on Simple Condiment PLU are available as follows:

Available	manual price price shift split pricing last item correction mark-up / mark-down % on item, on subtotal amount plus / discount on item, on subtotal adjustment (automatic % on specific items) ticket item (see Note below) single item tax shift programmed supplementary message (automatic) kitchen printer transfer --- printed in red (see Note below)
Not Available	void (see Note below) refund (see Note below) cooking message

Note for Ticket
In the ticket system, S.C. PLU will have another ticket separately from the ticket of the main PLU.

Note for Kitchen Printer Transfer
If a different kitchen printer is programmed by main PLU and S.C. PLU, both PLUs are transmitted to each programmed kitchen printer.

Note for Void
S.C. PLU is not voided at the same time when a main PLU is voided. First, void the main PLU, then void the S.C. PLU.

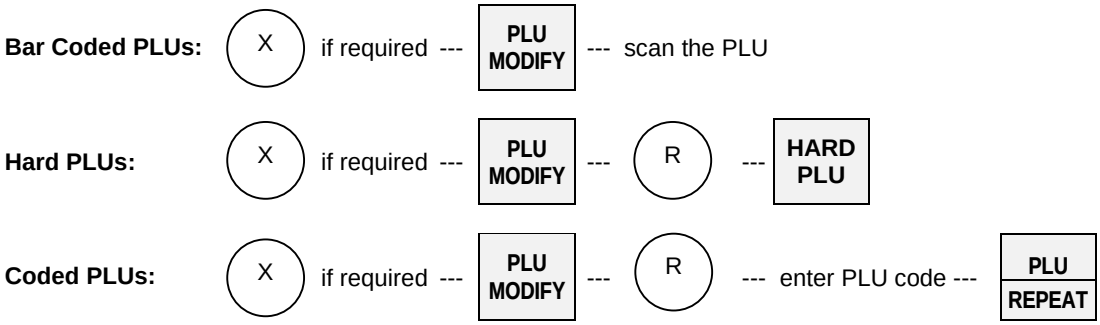
Note for Refund
S.C. PLU is not refunded at the same time when a main PLU is refunded. First, refund the main PLU, then refund the S.C. PLU. Refund of only the S.C. PLU is not available.

j) PLU Modifier

Using three modifier keys, one PLU can be changed to three different PLUs. Each modifier key is given a 3-digit modifier value (left one digit shows value, right two digits show number of digit).

For example, modifier value 1 is set at 105,
modifier value 2 is set at 205,
modifier value 3 is set at 305,

Then, **MODIFY 1** key places a fifth digit with a value of '1' to the PLU code.
PLU code 1001 is modified to PLU code **1**1001.
MODIFY 2 key places a fifth digit with a value of '2' to the PLU code.
PLU code 1001 is modified to PLU code **2**1001.
MODIFY 3 key places a fifth digit with a value of '3' to the PLU code.
PLU code 1001 is modified to PLU code **3**1001.



The following PLU codes are set:

1001:	SODA <S> 0.60
11001:	SODA <M> 0.95
21001:	SODA <L> 1.25
31001:	SODA <LL> 1.50

KEY ENTRY	DISPLAY	RECEIPT
SODA	PL .60	SODA <S> .60
MODIFY 1 -- a	PL .95	SODA <M> .95
SODA	,	SODA <L> 1.25
MODIFY 2 -- b	PL 1.25	SODA <LL> 1.50
SODA	,	
MODIFY 3 -- c	PL 1.50	
SODA	,	

a: Comma ", " is lit on the above REG lamp.
b: Comma ", " is lit on the above 2nd PRICE lamp.
c: Comma ", " is lit on the above 2nd MENU lamp.

Notes:
- To exit from the PLU modifier mode, press the same modifier key again.
- To change the value, press an other modifier key.
- Depending on programming [SF-70.a,b], this modifier value remains for one registration, for one transaction or until the next **PLU MODIFY** key depression.

k) Single Item

A PLU that has been programmed as a single item automatically closes the transaction by a programmed total key [SF-56.f~h]. This function is especially useful for the bar.

There are two types of single item transactions as follows:

Single-item 1: This can be used as normal registration with other non-single items and will not automatically close the transaction.

enter the **non-single item** --- enter the **single-item 1** --- can be continued ---

Single-item 2: This can be used with non-single items but will automatically close the transaction.

enter the **non-single item** --- enter the **single-item 2** --- closed automatically

Single-item 1 = BEER [PF-1.h]
Single-item 2 = MARTINI [PF-1.g]
Non-single item = SANDWICH

KEY ENTRY	RECEIPT	KEY ENTRY	RECEIPT
BEER	BEER 2.50 CASH 2.50 Closed automatically	MARTINI	MARTINI 4.50 CASH 4.50 Closed automatically
KEY ENTRY	RECEIPT	KEY ENTRY	RECEIPT
SANDWICH BEER	SANDWICH 3.00 BEER 2.50 Not closed	SANDWICH MARTINI	SANDWICH 3.00 MARTINI 4.50 CASH 7.50 Closed automatically

Single item combination for a PLU with link PLU

Programmed as	**Transaction will be**
Main PLU: single-item 1 or 2 Link PLU: non-single item or single-item 1 or 2	Only the main PLU is registered and closed automatically. The link PLU is not registered.
Main PLU: non-single item Link PLU: single-item 1 or 2	Both PLUs are registered and not closed if link PLU is single-item 1. If link PLU is single-item 2, it is closed automatically.

If a PLU and link PLU which are programmed as single items are entered with other non-single items, the transaction is either closed or not closed depending on the selecting of single-item 1 (can be continued) or single-item 2 (closed automatically).

l) Cooking Message & PLU Supplementary Message

< Cooking Message >

A PLU can have one cooking message that is entered by using **COOKING MESSAGE** key. The cooking message can be either preprogrammed (one of 50 messages) or manually entered.

To enter **a preprogrammed cooking message,**
- press one of **HARD COOKING MESSAGE 1 ~ 5 keys**, OR
- enter a number (called the "Supplementary message number") from 1 to 50 and press **COOKING MESSAGE** key.
- then, enter a PLU. The cooking message is printed **under** the PLU line on the receipt.

Cooking Message key: HAMBURGER with bacon (cooking message 7) is sold

KEY ENTRY	DISPLAY	RECEIPT
7 COOKING MESSAGE	. 7	HAMBURGER 6.00
		with bacon
HAMBURGER	PL 6.00	

lamp is lit when **COOKING MESSAGE** key is pressed.

To manually enter a cooking message, press **COOKING MESSAGE** key first. Then enter any alphanumeric message (up to 20 characters) and press **ENTER** key, then, enter a PLU.

Manual entry: Rare STEAK is sold (cooking message "rare" is manually entered)

KEY ENTRY	DISPLAY	RECEIPT
COOKING MESSAGE	00-00	STEAK 15.00
		rare
rare [ENTER]	. 0	You can press **X2** key for code entry. Refer to 24. Message for the
STEAK	PL 15.00	sequence (page 46).

If a wrong cooking message is entered, enter another cooking message or press **CR** key before a PLU entry. If the repeat or multiplication operation is done on a PLU, the PLU with cooking message is also repeated or multiplied.

< PLU Supplementary Message >

The supplementary message is the same as the cooking message (the same 1 ~ 50 messages are used) except that it is programmed to be automatically printed when the PLU it is linked to is entered. It is printed **above** the PLU line.

HAMBURGER (linked to the supplementary message number 7) is sold

KEY ENTRY	DISPLAY	RECEIPT
HAMBURGER	PL 6.00	with bacon
		HAMBURGER 6.00

4. Kitchen Printer

The ECR sends PLUs that have been programmed to print at specific kitchen printers after the transaction is closed by a media (total) key. In the clerk interrupt system, when a clerk's transaction is stored, the registered items are transmitted to the kitchen printer by [SF-81.b].

Food: go to the kitchen (KP 1)
Drinks: go to the bar (KP 2)
SALAD: simple condiment PLU
ROAST BEEF has a preprogrammed supplementary message "french fries" and one link PLU "SOUP".

KEY ENTRY
BEER
1 COOKING MESSAGE
CHICKEN
SALAD

ROAST BEEF

BEER

CASH

RECEIPT

```
BEER                 2.50
CHICKEN              9.00
mild sauce
□SALAD               3.00
french fries
ROAST BEEF          14.00
◇SOUP                1.00
BEER                 2.50
CASH     32.00
QUANTITY             6
#001-000050          10:11R
     CLERK NAME 00001
```

KITCHEN PRINTER 1
AT KITCHEN

```
ECR NO.1 --> KITCHEN
                  CLERK NAME 00001

  1 CHICKEN
        mild sauce  -- a
  1 SALAD     -- b
            french fries  -- c
  1 ROAST BEEF
  1 ◇SOUP

              03APR/2002#001-000050 10:11
```

KITCHEN PRINTER 2
AT BAR

```
ECR NO.1 --> BAR
                  CLERK NAME 00001

  2 BEER

              03APR/2002#001-000050 10:11
```

a: cooking message
b: simple condiment PLU
c: PLU supplementary message (centered)

Print Contents

- Pre-feed lines between cut line and last line is programmed by [SF-5.d,e,f].
- 1st line : the transmitting ECR name and the kitchen printer name are printed in double-width characters.
- 2nd line : the serving clerk's name is printed.
- The quantity and PLU descriptor are printed in double-width characters.
- PLU code is printed by [SF-87.c].
- Link PLU is printed with link PLU symbol " ◇ " if entered.
- Simple condiment PLU is printed in red without symbol " □ " if entered.
- If programmed by [SF-67.h], orders of the same item are combined together. A link PLU and simple condiment PLU however are regarded as separate items from the same main PLUs. Also, they are transmitted to a kitchen printer which has been set for them.
- < Track # > in double-width is printed in brackets if entered.
- * Table # * is printed in brackets if entered.
- Refunded or negative voided items are printed in red.
- Voided or corrected items in the same transaction are not printed.
- Last line : date, machine number, consecutive number (double-width by [SF-5.a]) and time are printed.
- Number of blank lines between cut line and last line are programmed by [SF-5.b,c].

Note for Mono-Ribbon

When a mono-ribbon is used in the kitchen printer, characters printed in red are printed in slim characters.

< Back-Up Kitchen Printer >

Depending on programming [SF-88], each kitchen printer may have been assigned a back-up in case of failure, intentional shut down, changing paper rolls, etc. After a transaction is closed and the ECR attempts to send a message to a down kitchen printer, an alarm sounds, and the one of warning messages (71 ~ 74) "kitchen printer 1 ~ 4 error" is displayed.

In the example below, KP 1 at the kitchen shuts down. KP 2 at the bar, programmed as the back-up, prints orders from the kitchen. The warning message #71 (KP 1 error) is displayed on the ECR and all the data sent to the kitchen printer (KP 1) which is down is printed on the back-up kitchen printer (KP 2). The data of the two kitchen printers are printed according to increasing kitchen printer number.

```
KITCHEN PRINTER 2
AT BAR
ECR NO.1 -->  KITCHEN
                    CLERK NAME 00001

  1 CHICKEN
        mild sauce
  1 SALAD
              french fries
  1 ROAST BEEF
  1 ◊SOUP

              03APR/2002#001-000051 10:12
------------------------------------------




ECR NO.1 -->  BAR
                    CLERK NAME 00001

  2 BEER

              03APR/2002#001-000051 10:12
```

header printed in red (or in slim if a mono-ribbon is set)

5. Media Closing

Up to five different media (total) keys may be used to close a transaction. Addition to these media keys, there are four preset tender keys that close a transaction by one-action which have preset tendering amounts.

The following closing methods are available.

Direct Closing : Press a media key directly.

registrations --- **TTL**

Tendering Input : Enter a tendered amount then press a media key.
Short tendering amount input prohibited for TTL 5 if [SF-64.b] is programmed.

registrations --- **SBTL** --- enter tendered amount --- **TTL**

When entered amount is over the due amount, the change is calculated automatically in cash if "automatic change" has been programmed.
If "automatic change" has not been programmed, a designated media should be pressed for the change as follows;

registrations --- **SBTL** --- enter tendered amount --- **TTL** --- **TTL**

Preset Tendering : One-action closing to speed up tendering by use of a preset amount media key.
Preset tendering amount is memorized in the memory of pre-programmed media number by [SF-58,59].

registrations --- **SBTL** --- **PRESET TENDER**

Media Multiplication : Makes it easier to sum up tendered amounts by using **Ten-Keys** and **X2** key. This function is available only when using one of four preset tender keys.

registrations --- **SBTL** --- enter number of pieces --- **X2** --- **PRESET TENDER**

The following depend on programming:
- automatic change;
- tendered amount input prohibited or compulsory;
- drawer open after media closing;
- cheque-cashing functions (refer to 10. Cheque Cashing / Cheque Printing section);
- cheque printing (refer to 10. Cheque Cashing / Cheque Printing section).

6. Tray Subtotal

Tray Subtotal Function for the payment by a group of customers is used at a cafeteria where uses a tray to serve Food & Drinks. Press **TRAY SUBTOTAL** key when item registrations are completed per customer. Then, the total amount of items for each customer is printed on the receipt.

Tray Subtotal

KEY ENTRY		RECEIPT	
Customer A	BEER	BEER 2.50	
	1 COOKING MESSAGE	CHICKEN 9.00	
	CHICKEN	mild sauce	
	SALAD	□SALAD 3.00	
	TRAY SBTL	TRAY SBTTL 14.50	total amount of customer A

Customer B	ROAST BEEF	french fries	
	BEER	ROAST BEEF 14.00	
	(TRAY SBTL)--- can be skipped	◇SOUP 1.00	
		BEER 2.50	
	CASH	TRAY SBTTL 17.50	total amount of customer B

		CASH 32.00	
		QUANTITY 6	

Notes:
- When using Tray Subtotal Function, "PLU not consolidated [SF-67.h=1]" must be programmed.
- Add-on tax amount is not included in tray subtotal.

7. Foreign Currency / Euro Currency

Any media may be programmed for foreign currency media except for **TTL 5** key which is used for local currency. **Foreign Currency Media** keys can be used the same way as a local currency media, including the R/A, P/O and Cash Declaration operations.

a) Closing Methods

Direct Closing : Press **Foreign Currency Media** key directly, without a tendered amount input.

Tendering Input : Before a foreign currency tendering amount is entered, **F.C. SBTL** and **F.C. Media** keys must be pressed to show the total amount in foreign currency. Then enter the foreign currency tendering amount and press the same **F.C. Media** key again.

registrations --- **F.C. SBTL** --- **F.C. MEDIA** --- due amount of foreign currency displayed --- enter foreign currency amount --- **F.C. MEDIA**

The change is calculated automatically in local currency if "automatic change" has been programmed. If "automatic change" has not been programmed, a designated media should be pressed for the change.

Over-Tendering by Foreign Currency

KEY ENTRY (item registrations)	DISPLAY		RECEIPT (item registrations)
F.C. SBTL	F 10.00	-- a	DUE AMOUNT 10.00
F.C. MEDIA	2 1070	-- b	0.9345 * 14.02 c
1500	1500	-- d	FC MEDIA ¤1500¤
F.C. MEDIA	CH 4.02	-- e	CHNGE 4.02

a: due amount of local currency
d: tendering amount in foreign currency
e: change amount in local currency (430 x 0.9345)

b: due amount of foreign currency
c: tendering amount in local currency is calculated from tendering amount in foreign currency (1500 x 0.9345)

b) Currency Exchange

In order to exchange a foreign currency to the local currency, enter the foreign currency amount and press **F.C. Media** key at the beginning of a transaction. The ECR automatically subtracts a service charge amount which is calculated by a programmed charge rate. The currency exchange operation is allowed depending on programming [SF-47,49,51,53.h].

KEY ENTRY	DISPLAY		RECEIPT	
30000	300.00		0.9345 * 280.35	-- a
F.C. MEDIA	CA 266.33		FC MEDIA ¤30000¤	tendering amount in foreign currency
			CHARGE 5 %⊖	-- b
			14.02⊖	cashing amount in local currency
			CHNGE 266.33	

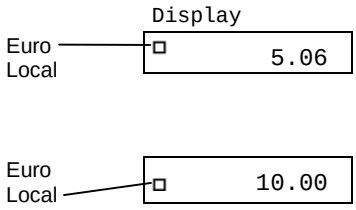
a: tendering amount in local currency is calculated from tendering amount in foreign currency (30000 x 0.9345)
b: charge amount in local currency is calculated from the programmed charge rate (280.35 x 5%)

c) Euro Currency System

A payment by the Euro currency is corresponded by an **Euro media** key. When a transaction is closed by **Euro media** key, the due amounts in local and Euro currencies are printed on the receipt. If taxable items are included in the transaction, the Euro taxable amount and tax are also printed separately from the local taxable amount and tax. Euro amount is calculated by "local amount x Euro rate".

< Display Method of Euro Currency System >

When **SBTL** key is pressed during a transaction, the display switches between Euro and local currencies in one second. Also, it can be manually switched by depression of **SBTL** key according to [SF-64.d] selection.



< Print Formats of Euro Currency System >

Either "Euro and currency symbols are printed or not printed [SF-65.b]" and "one space or no space between Euro currency & currency symbols and the amount [SF-64.h]" can be selected by programming.

Note: Tax lines in local and Euro currencies are printed when "VAT data printed" is selected.

The receipt format will be like the following samples;

1. Direct Closing by Local Currency in Euro Currency System

Euro & currency symbols printed

```
PLU                 10.00
DUE AMOUNT
                 DM 10.00
               ------------
                    € 5.06
  € 1.00 =    DM 1.97719
------------------------
CASH             DM 10.00
VATSALE           DM 9.10
VAT               DM 0.90
------------------------
VATSALE              € 4.60
VAT                  € 0.46
```

```
due amount (local)
--- only for reference ---
due amount (Euro) *1
Euro currency exchange rate *1
-------------------------------
directly closed by cash
VAT sales (local)
VAT amount (local)
--- only for reference ---
VAT sales (Euro) *2
VAT amount (Euro) *2
```

Euro & currency symbols not printed

```
PLU                 10.00
DUE AMOUNT
 LOCAL              10.00
                 ------------
 EURO                5.06   *1
  EURO  1.00 =  1.97719     *1
------------------------
CASH                10.00
VATSALE              9.10
VAT                  0.90
------------------------              *2
VATSALE EURO         4.60   *2
VAT     EURO         0.46
```

*1 These are printed by [SF-65.a]. When "due amount in Euro currency printed" is selected, either "Euro currency exchange rate is printed or not printed [SF-65.d]" can be selected.
*2 These are printed by [SF-24.a].

2. Direct Closing by Euro Currency

Euro & currency symbols printed

```
PLU                 10.00
DUE AMOUNT
                 DM 10.00
                   € 5.06
  € 1.00 =    DM 1.97719
EURO               € 5.06
             (= DM 10.00 )
VATSALE           DM 9.10
VAT               DM 0.90
-----------------------
VATSALE            € 4.60
VAT                € 0.46
```

due amount (local)
due amount (Euro) --- always printed
*1
directly closed by Euro
*2
VAT sales (local) *3
VAT amount (local) *3

VAT sales (Euro) *3
VAT amount (Euro) *3

Euro & currency symbols not printed

```
PLU                 10.00
DUE AMOUNT
 LOCAL              10.00
 EURO                5.06
  EURO  1.00 =   1.97719
EURO                5.06
               (= 10.00 )
VATSALE             9.10
VAT                 0.90
-----------------------
VATSALE EURO        4.60
VAT     EURO        0.46
```

*1
*2
*3
*3

*3
*3

*1 Euro currency exchange rate is printed by [SF-65.d].
*2 Calculated amount in local currency is printed by [SF-64.e].
*3 These tax lines are printed by [SF-22.h].

3. Direct Closing by Foreign Currency in Euro Currency System

When "Foreign currency exchanged directly" is selected, the print format of foreign currency exchange rate will be as follows;

Foreign currency exchange rate =
Foreign currency / Local currency

```
PLU                 10.00
DUE AMOUNT
                 DM 10.00
              ------------
                 FF 33.54
  DM 1.00 * FF 3.353876
              ------------
FRANC            FF 33.54
             (= DM 10.00 )
VATSALE           DM 9.10
VAT               DM 0.90
```

due amount (local)

due amount (foreign)
foreign currency exchange rate

directly closed by foreign currency
calculated amount in local currency

Foreign currency exchange rate =
Local currency / Foreign currency

```
PLU                 10.00
DUE AMOUNT
                 DM 10.00
              ------------
                 FF 33.54
  DM 1.00 / FF 0.298162
              ------------
FRANC            FF 33.54
             (= DM 10.00 )
VATSALE           DM 9.10
VAT               DM 0.90
```

8. Cheque Cashing / Cheque Printing

a) Cheque Cashing

In order to exchange a Cheque for local currency, enter the cheque amount and press a **Media** key which has been programmed for cheque cashing at the beginning of a transaction. The ECR automatically subtracts a service charge amount which is calculated by using a programmed charge rate.

b) Cheque Printing on Slip Printer (TP-620)

A cheque is printed only when the transaction is closed by press a **Media** key which has been programmed for cheque depending on programming [SF-57.d].

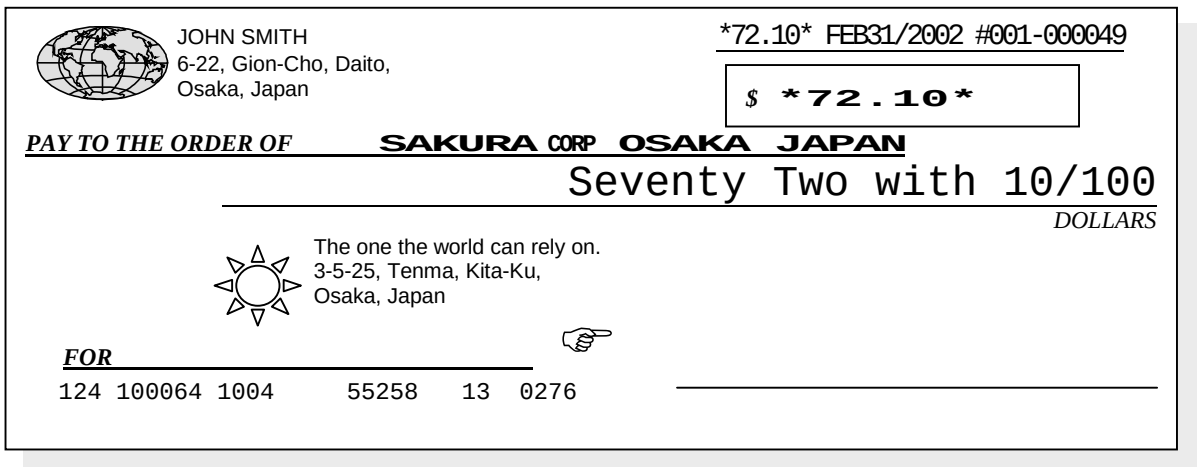
The following contents are printed on a cheque using a slip printer (the print positions are programmable):
- cheque message
- total amount in normal-size characters
- total amount in double-width characters
- date
- ECR machine number, consecutive receipt number

Depending on programming [SF-57.c], there are two ways to print a cheque.

1. **Manual cheque printing when a transaction is closed by Cheque Media key**
   Even if a cheque has not been set on the slip printer, the cheque printing data will be sent to the printer and a warning message will be displayed on both the ECR and the slip printer.

2. **Automatic cheque printing when a transaction is closed by Cheque Media key and a cheque has been inserted into the slip printer**
   In this case, if a cheque has not been set on the slip printer when pressing **Cheque Media** key, the cheque printing function will be **automatically canceled** and no warnings will appear.

Cheque Sample



9. Tip Operation

A tip amount can be entered as either an amount separate from payment or as change from over-tendering.

a) Tip Amount Input

registrations --- enter a tip amount --- **TIP** --- **TTL** --- close transaction or continue registration

KEY ENTRY	DISPLAY	RECEIPT
BEER		BEER 3.00
T-BONE STEAK		T-BONE STEAK 25.00
50 TIP	┤ .50	TIP
CASH	28.00	CASH .50
CASH	5 28.00	CASH 28.00
		QUANTITY 2

		MEDIA&TIP
		CASH 28.50

printed by [SF-8.f]

Note for Tip Media Amount Print
If the tip media and the tendering media are the same key like the key sequence above, the tip amount and the tendering amount are added together, then printed with a programmable message by [SF-8.f].

b) Change Kept As Tip

This function <u>can not</u> be done when the automatic change calculation has been programmed by [SF-47,49,51,53,55.e].

registrations --- **SBTL** --- enter the over-tendered amount --- **TTL** --- **TIP** --- **TTL**
(change will be the tip)

KEY ENTRY	DISPLAY	RECEIPT
BEER		BEER 3.00
T-BONE STEAK		T-BONE STEAK 26.50
SBTL		SBTL 29.50
3000 CASH	CH .50	DUE AMOUNT
TIP	┤ .50	29.50
CASH	5 .50	CASH 30.00
		TIP
		CASH .50
		QUANTITY 2

		MEDIA&TIP
		CASH 30.00

printed by [SF-8.f]

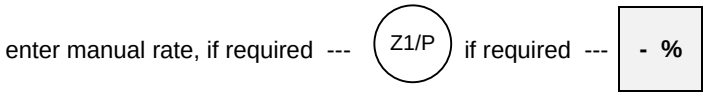
10. Mark-up / Mark-down

The key operation determines whether the mark-up/-down is calculated on the item or subtotal. For mark-up/-down on item, press **%** key immediately after the item is entered. For mark-up/-down on subtotal, press **SBTL** key before pressing **%** key.

The following depend on programming [SF-40~42];

- a manual rate entry is permitted or prohibited;
- mark-up/down amount always affects or does not affect the taxable subtotal;
- mark-up/down on item or on subtotal operation permitted or prohibited.

Only for the mark-down, turning the control key to the **Z1/P position** may be set as required by programming [SF-32.f].



Mark-up (on item) : %1 key has been programmed for mark-up of 5%

KEY ENTRY	DISPLAY	RECEIPT
BEER	PL 2.50	BEER 2.50
ROAST BEEF	PL 14.00	ROAST BEEF 14.00
%1	1 .70	% 1 5 %
	%	.70
CASH	5 17.20	CASH 17.20

Mark-down (on subtotal) with manual rate entry: **%**2 key has been programmed for mark-down of 5%

KEY ENTRY	DISPLAY	RECEIPT
BEER		BEER 2.50
ROAST BEEF		ROAST BEEF 14.00
SBTL	16.50	SBTL 16.50
		16.50 X 4%⊖
4 %2	2 -.66	% 2 .66⊖
CASH	%	CASH 15.84

printed if programmed

11. Adjustment (Automatic % on Specific Items)

The adjustment function is provided for *Membership discounts, Whole-sales prices, Employees, etc.* Each PLU can be assigned to one of three adjustments by programming [PF-1]. Mark-up and Mark-down are presettable on each item, saving the trouble of manually entering rates.

The depression of **ADJUST 1** key, **ADJUST 2** key or **ADJUST 1&2** key after entering items will calculate the mark-up/down amount. After an adjustment key depression, only a closing operation by a media key or **NEW BAL.** key is permitted.

Depending on programming [SF-36, 37], adjustment amount affects or does not affect the taxable subtotal, and turning the control key to the **Z1/P position** may be set as required by programming [SF-33.e,f].

<Example>

ADJUST 1 **Adjustment 1** key is used for price reduction (2%-)

ADJUST 2 **Adjustment 2** key is used for price reduction (5%-)

ADJUST 1&2 **Adjustment 1 & 2** key is used for price reduction (2%-, 5%-)

ADJUST 1 : CAKE = Adjustable 1 item
COFFEE = Adjustable 2 item

KEY ENTRY	DISPLAY	RECEIPT
CAKE		CAKE 1.50
COFFEE		COFFEE 1.00
ADJUST 1	1 -. 3 ▼ ▽	1.50 X 2%⊖ adjustable 1 amount x adjustment 1 rate
		AJST1 .03⊖ adjustment 1 amount
CASH	+/- lamp flashing	CASH 2.47

ADJUST 1&2 : CAKE = Adjustable 1 item
COFFEE = Adjustable 2 item

KEY ENTRY	DISPLAY	RECEIPT
CAKE		CAKE 1.50
COFFEE		COFFEE 1.00
ADJUST 1&2	3 -. 8 ▼ ▽	1.50 X 2%⊖
		AJST1 .03⊖
		1.00 X 5%⊖
CASH		AJST2 .05
		CASH 2.42

12. Amount Plus / Amount Discount

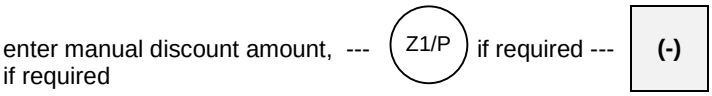
A plus/discount amount can be entered manually or the programmed amount is added/subtracted automatically.

The key operation determines whether the amount is added to the item or subtotal. For plus/discount on item, press **(+) or (-)** key immediately after the item is entered. For plus/discount on subtotal, press **SBTL** key before pressing **(+) or (-)** key.

The following depend on programming [SF-44,45];

- plus/discount on item or on subtotal operation permitted or prohibited;
- plus/discount amount always affects or does not affect the taxable subtotal.

Only for the discount operation, turning the control key to the **Z1/P position** may be set as required by programming [SF-32.e].



Amount discount operation on item : (-) key is programmed for 0.30 discount

KEY ENTRY	DISPLAY	RECEIPT
HAMBUGER		HAMBURGER 3.50
COFFEE		COFFEE 1.00
(-)	-.30	DSCNT .30⊖
		CASH 4.20
CASH		

13. Last Item Correction

CR key is used to cancel the last-registered item.

Press **CR** key immediately after the wrong item or the wrong function key is registered. The corrected item is never printed on the post-receipt, kitchen printer and slip printer.

COFFEE is corrected.

KEY ENTRY	DISPLAY
CAKE	PL 1.50
COFFEE	PL 1.00
CR	PL ,,,,1.00
CASH	5 1.50

RECEIPT

```
CAKE                1.50
COFFEE              1.00
------ CORRECTED  ------
CASH       1.50
```

PLU (HAMBURGER) with link PLU (COFFEE) is corrected.

KEY ENTRY	DISPLAY
CAKE	PL 1.50
HAMBURGER	PL 4.50
CR	PL ,,,,,4.50
CASH	5 1.50

RECEIPT

```
CAKE                1.50
HAMBURGER           3.50
◇COFFEE             1.00
------ CORRECTED  ------
       2 PS CORECT
CASH       1.50
```

number of corrected items is printed

14. Void

VOID key is used to void an item which has been registered in the current transaction.
In order to void an item registered by a series of key depression, the same key operation must be repeated.

Bar Coded PLUs: repeat same key operations (manual price, multiplication, etc.) --- **VOID** --- scan the PLU

Hard PLUs: repeat same key operations (manual price, multiplication, etc.) --- **VOID** --- **HARD PLU**

Coded PLUs: repeat same key operations (manual price, multiplication, etc.) --- enter PLU code --- **VOID** --- **PLU** / **REPEAT**

Depending on programming [SF-32.d], turning the control key to the **Z1/P position** may be required to allow voiding operations.

repeat same key operations for voided item --- (Z1/P) if required --- **VOID** --- (R) --- enter the PLU

Two ICE CREAMs which are entered with manual prices are voided.

KEY ENTRY	DISPLAY	RECEIPT
100 ICE CREAM		ICE CREAM 1.00
CAKE		CAKE 1.50
100 ICE CREAM		ICE CREAM 1.00
2 [X2] 100 VOID	▼ 2 1.00 ▽	2 X 1.00
		ICE CREAM 2.00
ICE CREAM	PL -2.00 ▼ ▽	↑↑↑↑↑ VOID ↑↑↑↑↑
		CASH 1.50
CASH	5 1.50	

< Kitchen Printer/Slip Printer >

The voided item is not printed on the kitchen printer and slip printer. Only the negative voided item is printed in red (or in slim if a mono-ribbon is set) on the kitchen printer and in black on the slip printer with a minus symbol but with no void message.

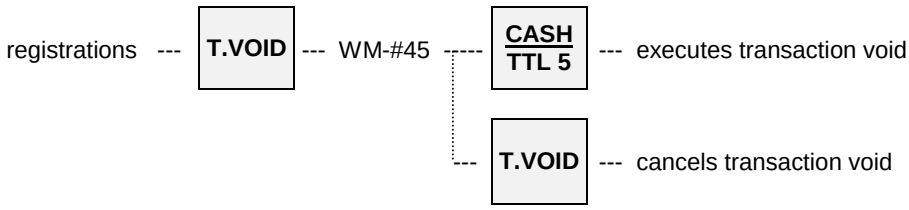
< Items in Track >

An item registered in a track can be canceled by voiding the previous item at any time before it is closed by a media key.

15. Transaction Void

Transaction Void can be done if you wish to cancel all the registrations in a transaction.
This is available only before the transaction is closed.

In order to cancel all the registrations, simply press **TRANSACTION VOID** key.
Then, the ECR shows Warning Message #45 (means "are you sure to execute?").
Press **CASH/TTL 5** key to execute it or press **TRANSACTION VOID** key again to cancel it.



Depending on programming [SF-32.d], turning the control key to the **Z1/P position** may be required to allow transaction void.

Transaction Void

KEY ENTRY	DISPLAY	RECEIPT
ICE CREAM		ICE CREAM 1.00
CAKE		CAKE 1.50
		↑↑↑↑↑↑ T.VOID ↑↑↑↑↑↑
T.VOID	qE-45	
CASH	---t_Void---	

16. Refund / Media Refund

REFUND key is used to refund a registered item after the transaction has been closed.
The ECR will not check to see if the refunded item was actually registered except in the case of item track operation before the track has been closed by a media key.

In order to refund an item registered by a series of key depression, the same key operation must be repeated.
Press **REFUND** key after entering the data (PLU code, manual price, etc.).

Bar Coded PLUs: repeat same key operations (manual price, multiplication, etc.) --- [REFUND] --- scan the PLU

Hard PLUs: repeat same key operations (manual price, multiplication, etc.) --- [REFUND] --- [HARD PLU]

Coded PLUs: repeat same key operations (manual price, multiplication, etc.) --- enter PLU code --- [REFUND] --- [PLU / REPEAT]

Depending on programming [SF-32.c], turning the control key to the **Z1/P position** may be required to allow refunding operations.

repeat same key operations for refunded item --- (Z1/P) if required --- [REFUND] --- (R) --- enter the PLU

ORANGE JUICE is refunded.

KEY ENTRY	DISPLAY
REFUND	. 0
ORANGE JUICE	PL -2.00
CASH	5 -2.00

The refunded item is printed in red (or in slim if a mono-ribbon is set) on the kitchen printer and in black on the slip printer with a minus symbol but with no refund message.

RECEIPT

```
ORANGE JUICE        2.00
 ↑↑↑↑↑REFND ↑↑↑↑↑
CASH          2.00⊖
```

KITCHEN PRINTER

```
ECR NO.1 -->  BAR
                    CLERK NAME 00001

  1⊖ ORANGE JUICE

                03APR/2002#001-000060 11:11
```

Media Refund

This function is useful if a transaction to be refunded was closed by plural media keys. It is not required to do if the transaction was closed by one media key.

By this operation, the refunded amounts are subtracted from the respective media memory, but they are not memorized in the refund memory.

For example, when the transaction below is required to refund, then the operation sequence will be;

```
PLU-NAME 0001  1.00
PLU-NAME 0002  2.00
SBTL           3.00
DUE AMOUNT  3.00
CASH           1.00
CHECK          2.00
```

KEY ENTRY	DISPLAY	RECEIPT
REFUND	PL -1.00	PLU-NAME 0001 1.00
PLU 1		↑↑↑↑↑REFND ↑↑↑↑↑
REFUND	. 0	PLU-NAME 0002 2.00
PLU 2	PL -2.00	↑↑↑↑↑REFND ↑↑↑↑↑
MEDIA REFUND	. 0	DUE AMOUNT 3.00⊖
100 CASH	-2.00	CASH 1.00
MEDIA REFUND	. 0	↑↑↑↑↑REFND ↑↑↑↑↑
CHECK	1 -2.00	CHECK 2.00⊖

media refund operation

17. Tax

Each PLU can have one of four taxes and they are calculated by either VAT method or Add-On Tax method.

VAT Method [SF-21.e~f=0]

Tax amount is included in the price. The tax shift is available however, manual tax amount entry and manual tax exemption are not available.

Add-On Tax Method [SF-21.e~f=1]

Tax amount is charged separately from the price. **Tax Rate or Tax Table** selection is available for each tax by [SF-21.a~d]. The tax shift, manual tax amount entry and manual tax exemption are available.

The following items can be printed by programming:

- tax symbol printed or not printed [SF-22.d]
- taxable subtotal amount printed or not printed [SF-22.e]
- tax amount printed even if tax = 0 or not printed [SF-22.f]
- tax amounts printed separately or consolidated on one line [SF-22.g]
- VAT data printed or not printed (add-on tax data always printed) [SF-22.h]
- VAT taxable subtotal printed with tax or without tax [SF-22.c]

The following operations are possible **only for the add-on tax items:**

Taxable Subtotal Display

PLU entry --- [**TAX SHIFT 1 ~ 4**] --- [**SBTL**]

The taxable subtotal is displayed by using the proper **TAX SHIFT** key and **SBTL** key immediately after registering the PLU.

Net Subtotal Display

PLU entry --- [**NET SBTL**]

Net subtotal without add-on tax amount is displayed with "⊓" symbol. The amount is printed by [SF-81.c].

Manual Tax Entry

PLU entry --- manual tax amount --- [**TAX**] --- [**TAX SHIFT 1 ~ 4**]

After it is performed, all other operations are prohibited, except for a media closing.

Manual Tax Exemption
(available if permitted by programming [SF-23])

PLU entry --- [**TAX SHIFT 1 ~ 4**] --- [**TAX**]

This may be used at the end of a transaction to exempt the whole transaction from a particular tax rate, e.g. the whole sale could be exempted from Tax 2.
After it is performed, all other operations are prohibited, except for a media closing.

< **Automatic Tax Exemption for Add-On Tax System** >

If the tax exemption limit amount is programmed by PGM-108, the tax amount is automatically exempted according to the taxable subtotal amount per entered number of people or per transaction by [SF-23.e~h].

< Tax Shift >

It is possible for both the VAT tax items and the add-on tax items:
Tax status is changed by **TAX SHIFT 1 ~ 4** keys.

Tax Shift for Bar Coded PLU : [TAX SHIFT 1 ~ 4] --- scanner

Tax Shift for Hard PLU : [TAX SHIFT 1 ~ 4] --- [HARD PLU]

Tax Shift for Coded PLU : PLU code entry --- [TAX SHIFT 1 ~ 4] --- [PLU / REPEAT]

i) TAX SHIFT ON VAT TAX ITEMS

Depression of a tax shift key changes a tax status to a different VAT tax status.

	TAX SHIFT KEY PRESSED			
	TAX SHIFT 1 key	TAX SHIFT 2 key	TAX SHIFT 3 key	TAX SHIFT 4 key
Non-taxable & VAT taxable items are changed to ...	taxable 1	taxable 2	taxable 3	taxable 4

ii) TAX SHIFT ON ADD-ON TAX ITEMS

Tax shift can also be used with the add-on tax items but in a way which is different from the VAT items. If the pressed TAX SHIFT key number and the item's tax number are the same, the item will become non-taxable. If the pressed TAX SHIFT key number and the item's tax number are different, the tax status will be both the original item's tax status and the shifted tax status as follows:

	TAX SHIFT KEY PRESSED			
ADD-ON TAX STATUS	TAX SHIFT 1 key	TAX SHIFT 2 key	TAX SHIFT 3 key	TAX SHIFT 4 key
Non-taxable item	taxable 1	taxable 2	taxable 3	taxable 4
TAXABLE 1 ITEM	non-taxable	1, 2	1, 3	1, 4
TAXABLE 2 ITEM	taxable 1, 2	non-taxable	2, 3	2, 4
:	:	:	:	:
TAXABLE 1 & 2 ITEM	2	1	1, 2, 3	1, 2, 4
TAXABLE 1 ~ 4 ITEM	2, 3, 4	1, 3, 4	1, 2, 4	1, 2, 3

The function of TAX SHIFT keys depends on which tax method is selected for each of the four taxes. Tax shift for the VAT system affects only VAT tax items and tax shift for the add-on system affects only add-on tax items. For example, Tax 1 and 2 are VAT method, tax 3 and 4 are add-on tax method, PLU 1's tax status is tax 1 & 3:

	TAX SHIFT KEY PRESSED			
PLU 1's TAX STATUS	TAX SHIFT 1 key (VAT)	TAX SHIFT 2 key (VAT)	TAX SHIFT 3 key (add-on tax)	TAX SHIFT 4 key (add-on tax)
TAX 1 (VAT method)	no change	taxable 2	no change	no change
TAX 3 (add-on tax method)	no change	no change	non-taxable	taxable 3 & 4
PLU1's tax status will be	**taxable 1 & 3**	**taxable 2 & 3**	**taxable 1**	**taxable 1, 3, 4**

18. R/A (Received on Account)

Records an amount of money received into the cash drawer when no customer transaction has taken place (i.e. in order to register the money prepared for change into the ECR memory).

50.00 x 1 piece and 5.00 x 10 pieces are entered

KEY ENTRY	DISPLAY	RECEIPT
R/A	rA . 0	CASH 50.00
	▼ ▼	CASH 50.50
5000 CASH	5 50.00	R/A 100.00
10 [X2]		
PRESET TENDER 1	5 50.00	
R/A	rA 100.00	

Media multiplication can only be done using a preset tender media key. **PRESET TENDER 1** key has been assigned to CASH/TTL 5 memory.

19. P/O (Paid Out)

Records an amount of money withdrawn from the cash drawer when no customer transaction has taken place.

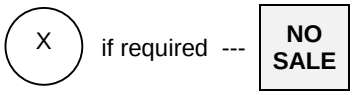
50.00 is withdrawn.

KEY ENTRY	DISPLAY	RECEIPT
P/O	Po . 0	CASH 50.00
	▼ ▽	P/O 50.00
5000 CASH	5 -50.00	
P/O	Po -50.00	

20. No Sale

For opening the drawer when no transaction has taken place. Simply press **NO SALE** key. Depending on programming [SF-32.g], turning the control key to the **X position** may be required.

No sale operation is not printed on receipt (printed on journal) in order to save paper if [SF-5.f] is selected.



"0.00" or ".00" Print and Display

You can choose ".00" or ". 0" for display by the flag selection [SF-57.a] and "0.00" by [SF-56.a~e].

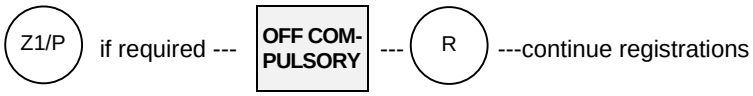
	DISPLAY	RECEIPT	
[SF-57.a=0]	. 0	NSALE . 0	[SF-47~55.b=1]
[SF-57.a=1, SF-56.a~e=1]	0.00	NSALE 0.00	[SF-47~55.b=0]
[SF-57.a=1, SF-56.a~e=0]	.00	NSALE .00	[SF-47~55.b=0]

21. Off Compulsory

OFF COMPULSORY key is used for the temporary release of all compulsory conditions.

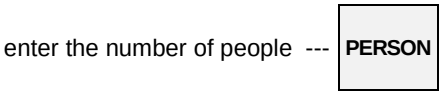
For example, under a track number entry compulsory condition, press **OFF COMPULSORY** key at the beginning of a transaction for release of the compulsory condition.

Depending on programming [SF-33.g], turning the control key to the **Z1/P position** may be required in order to use **OFF COMPULSORY** key.



22. Number of People

It is possible to input 99 people with **PERSON** key. Overriding input is also possible.



KEY ENTRY
2 PERSON
BEER
RED WINE
CASH

DISPLAY

```
P- 2
```

RECEIPT

```
BEER                2.50
RED WINE            3.00
CASH              5.50
QUANTITY               2
PERSN                  2
```

number of people

```
Clerk Interrupt System
<01>
                       2
BEER                2.50
RED WINE            3.00
CASH              5.50
QUANTITY               2
```

number of people

If a post-receipt is printed by **BUFFER PRINT** key in the receipt off condition, number of people is printed at right of the clerk name.

BUFFER PRINT

```
POST-RECEIPT
Served by
CLERK NAME 00001       2
BEER                2.50
RED WINE            3.00
CASH              5.50
QUANTITY               2
```

number of people

23. Message

Up to 19 digits of number or message inputs are possible with **MESSAGE** key.

Number Input: enter number --- **MESSAGE**

Message Input: **MESSAGE** --- enter message --- **ENTER**

KEY ENTRY	DISPLAY	RECEIPT
123456789	1234567.89	MESS1
MESSAGE	▼ ▼	123456789#
MESSAGE	00-00	MESS1
A	01-34	ABC#
B	02-35	
C	03-36	
ENTER	. 0	

alphabet entry mode

03: number of characters, 36: character code for C

KEY ENTRY	DISPLAY	
MESSAGE	00-00	Alphabet entry mode and Code entry mode is toggled by **X2** key depression.
X2 (for code entry)	00 00-00	
34 (for A)	34 01-34	
35 (for B)	35 02-35	code entry mode
36 (for C)	36 03-36	
ENTER	. 0	

Used Keys	Functions
CAPITAL	to enter upper-case letters for the stroke keyboard
↑ up arrow	for the flat keyboard
SMALL	to enter lower-case letters for the stroke keyboard
↓ down arrow	for the flat keyboard
DOUBLE	to enter a double-width character (press this key after each character entry)
BACK SP	to enter a back space
SPACE	to enter a space
RPF	to shift cursor left for the stroke keyboard in the code entry mode
← left arrow	for the flat keyboard
JPF	to shift cursor right for the stroke keyboard in the code entry mode
→ right arrow	for the flat keyboard
X2	to toggle between Alphabet entry mode and Code entry mode
CL	to cancel character input before pressing **ENTER** key
ENTER	to finish character input

Character Code Table

A	34	**N**	47	**a**	66	**n**	79	**0**	17	**&**	07	<	29
B	35	**O**	48	**b**	67	**o**	80	**1**	18	**'**	08	**Σ**	30
C	36	**P**	49	**c**	68	**p**	81	**2**	19	**£**	09	>	31
D	37	**Q**	50	**d**	69	**q**	82	**3**	20	**Ñ**	10	**?**	32
E	38	**R**	51	**e**	70	**r**	83	**4**	21	*****	11	**@**	33
F	39	**S**	52	**f**	71	**s**	84	**5**	22	**Å**	13	**Ä**	60
G	40	**T**	53	**g**	72	**t**	85	**6**	23	**-**	14	**Ö**	61
H	41	**U**	54	**h**	73	**u**	86	**7**	24	**.**	15	**Ü**	62
I	42	**V**	55	**i**	74	**v**	87	**8**	25	**/**	16	**Æ**	63
J	43	**W**	56	**j**	75	**w**	88	**9**	26	**space**	01	double-width	96
K	44	**X**	57	**k**	76	**x**	89	**#**	04	**:**	27		
L	45	**Y**	58	**l**	77	**y**	90	**$**	05	**Ø**	28	€	97
M	46	**Z**	59	**m**	78	**z**	91	**%**	06				

24. Validation / Slip Validation

Validation on the ECR's internal printer is available. Validation on the slip printer is also available if the ECR is programmed for use with a slip printer TP-620 and a slip paper is inserted before **VALIDATION** key is pressed.

They can be issued for any item after it is registered, any media after payment is made, or for the total after the transaction is closed.

Item & Media Validations: insert validation paper after an item or a media is registered --- **MISC. VALID.**

Total Validations: insert validation paper after a transaction is closed --- **TTL VALID.**

KEY ENTRY
BEER 6 BOTTLES

insert a paper for item validation
MISC. VALID.

CASH
insert a paper for media validation
MISC. VALID.

insert a paper for total validation
TTL VALID.

time printed by [SF-9.a]

RECEIPT

```
BEER 6 BOTTLES     6.60
CASH       6.60
```

```
FEB15/2002#002-0001 BEER 6 BOTTLES       6.60
```

```
FEB15/2002#002-000001 CASH               6.60
```

```
FEB15/2002#002-000001 AMONT              6.60
```

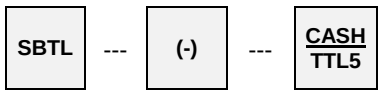
```
FEB15/2002#002-000001 11:43 AMONT        6.60
```

The following depend on programming by [SF-9]:
- Validation is compulsory or is not compulsory
- Validation can be printed only one time or an unlimited number of times
- Validation printed by upside-down or normal character (not available for the slip printer)
- Time printed or not printed

25. Arrangement

There are four kinds of arrangement keys. Up to ***50-key steps*** operations can be assigned to each one of the Arrangements. Execution of programmed steps can be performed by depression of the appropriate **ARRANGEMENT 1 ~ 4** key.

Example 1: **ARRANGEMENT 1** key is programmed for an automatic discount and closing operations as follows:



(-) key is programmed for 0.30 discount

KEY ENTRY	DISPLAY	RECEIPT
SALMON STEAK	PL 15.00	SALMON STEAK 15.00
ARRANGE 1	5 14.70	SBTL 15.00
		DSCNT .30⊖
		CASH 14.70

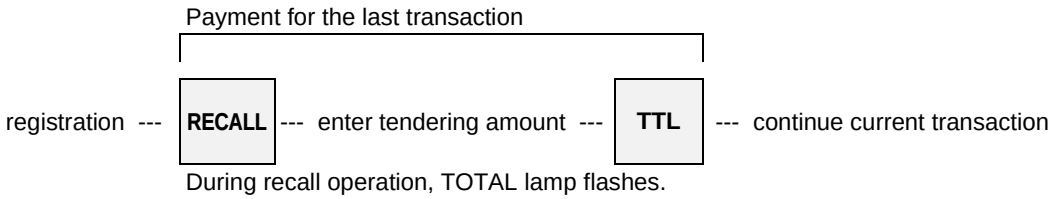
Example 2: **ARRANGEMENT 2** key is programmed for assorted reports.
X-03 Full Transaction report (3, X2, TTL5)
X-05 Hourly report (5, X2, TTL5)
X-10 Clerk report (1, 0, X2, TTL5)

Operation
Turn the control key to the **X position** and press **ARRANGEMENT 2** key. Then, above reports will automatically be printed.

26. Recall

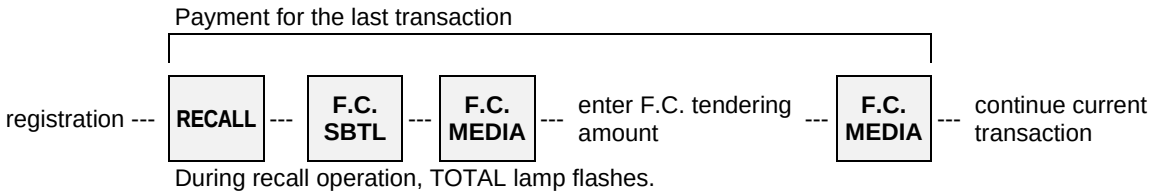
The total amount of the last transaction **which has been closed directly by a media key** can be recalled by **RECALL** key. The receipt of the last transaction is issued when the transaction is directly closed. After that, no additional receipt is issued during the recall operation. A transaction which has been closed with amount tendered can not be recalled.

The recalled transaction must be closed by a media key with a tendering amount entry. It is canceled by **CL** key.



Recall of the transaction which is closed by a foreign currency media

When the last transaction is recalled, the closed foreign currency media key name and the total amount in local currency is displayed. Before entering the foreign currency tendering amount for the last transaction, **F.C. SBTL** key and the specific foreign currency media key must be pressed.



The last transaction is recalled during the current transaction

KEY ENTRY	DISPLAY	RECEIPT (last transaction)
(current transaction)		SALMON STEAK 11.00 WINE 6.00 CASH 17.00
STEAK	PL 15.00	
WINE	PL 6.00	
(recall the last transaction) --- TOTAL lamp flashes during a recall operation		
RECALL	5 17.00 ▼ ▽	displays the last transaction's total amount
2000 CASH	CH 3.00	Tendering amount input compulsory except when using **PRESET TENDER** key. If the automatic change is not programmed, a designated media must be pressed to calculate the change.
(continue the current transaction)		RECEIPT (current transaction)
TOMATO SALAD	PL 5.00	STEAK 15.00 WINE 6.00 TOMATO SALAD 5.00 CASH 26.00
CASH	5 26.00	

27. Simple Track System - Item Track or Amount Track

Limitations
- Clerk interrupt system can not be used.
- Table number assignment is not available.

Following contents are described in this section.
- Two Track Systems
- Track Number Entry Method
- Two Clerk Track Assignment Methods
- Track Operation Sequences

- ***Track Systems --- One of Item or Amount Track System can be used.***

	Item Track System [SF-15.c=0]	**Amount Track System [SF-15.c=1]**
# of Tracks	Standard (max.) 30 tracks are handled.	Same as Item Track System
Track # Entry	Sequential 1 ~ 30 track numbers can be entered manually.	Same as Item Track System
# of Items per Track	Registers up to 107 items. (item includes tax data, transaction data)	Not available
Characteristics	Records detailed registration contents.	Records only transaction totals.
	Track is identified by Track #.	Same as Item Track System
	Track can be temporarily closed by **NEW BAL.** , until finally closed by a media key.	Same as Item Track System
	Tax is printed each time the track is closed or it is printed only when the track is finally closed by a Media key depending on programming [SF-16.g].	Same as Item Track System
Table Assignment	Not available	Not available
Clerk Track Assignment	Available by [SF-16.a]	Available
Post-Bill	Shows the last transaction contents immediately after the track is closed by pressing **BUFFER PRINT** key. This can be used as a Check-Out Bill if Post-Bill is issued every time when the track is closed.	Same as Item Track System
Subtotal Bill	Temporarily closed Track contents printed by **CHECK-OUT BILL** key. This is used to check the track contents and it can be used as a Check-Out Bill if programmed.	Not available
Check-Out Bill	Entire contents of finally closed Track printed by **CHECK-OUT BILL** key.	Not available
Track Transfer	Available	Available

- ***Track Number Entry Method -- Manual Track Number Method***

The track is assigned by manually entering sequential track number 1 ~ 30 with the depression of **TRACK #** key.

enter track #1 ~ 30 --- **TRACK #** --- new track number is assigned

After a track is finally closed by a media key, the track number can be used again.

- ***Clerk Track Assignment Methods***

1) Free Clerk Track Assignment [SF-16.a=0]

Any clerk can open, access and close any track.

2) Clerk Track Assignment in Registration [SF-16.a=1]

Any clerk may open a new track, however, subsequent entries to the track are restricted to the clerk who originally opened the track.

- ***Track Operation Sequences***

A. Item Track System

a) Opening a New Track & Closing Temporarily
   < Opening a New Track >
   < Closing a Track Temporarily >
   < Issuing a Post-Bill and/or Subtotal Bill >

b) Picking Up a Track & Closing a Track Finally
   < Picking Up a Track >
   < Closing a Track Finally >
   < Issuing a Check-Out Bill >

c) Track Transfer to a New Track or a Designated Track

d) Track Balance Calculation (display only)

B. Amount Track System

All functions, except Check-Out/Subtotal Bill issues, are the same as the item track system.

A. Item Track System [SF-15.c=0]

a) Opening a New Track & Closing Temporarily

< Opening a New Track >

Enter a sequential track number (1 ~ 30) and press **TRACK #** key.

enter track # --- **TRACK #** --- new track number is assigned

A track number may be assigned at anytime while in a transaction.

< Closing a Track Temporarily >

Enter registrations as normal and then, it can be closed temporarily through **NEW BAL.** key.

KEY ENTRY	DISPLAY	RECEIPT
1 TRACK #	┌0000001┐ .	<.....1> .00 SALMON STEAK 11.00 BEER 2.50 CURENT CHG 13.50 N.B 13.50 QUANTITY 2 #001-000001 19:13R CLERK NAME 00001
SALMON STEAK BEER		
NEW BAL.	nb 13.50	

current charge printed by [SF-15.d]

< Issuing a Post-Bill and/or Subtotal Bill >

Immediately after a track is closed temporarily, if **CHECK-OUT BILL** key is pressed, a Subtotal Bill which shows the track contents is printed. If **BUFFER PRINT** key is pressed, a Post-Bill which shows only the last track's contents is printed.

open track --- register items --- [NEW BAL.] --- track temporarily closed --- [CHECK -OUT BILL] --- Subtotal Bill is issued

open track --- register items --- [NEW BAL.] --- track temporarily closed --- [BUFFER PRINT] --- Post-Bill is issued (one time)

After a Post-Bill is issued, a Subtotal Bill can be still issued by entering the track number and pressing **CHECK-OUT BILL** key.

enter track # --- [CHECK -OUT BILL] --- Subtotal Bill is issued

Post-Bill (See Sample 1 on the next page.)
Post-Bill shows the last transaction's contents on a receipt in the receipt-off condition or on a slip if programmed to use.

*** Automatic Line Finder**

If a Post-Bill of the track has been issued previously, the automatic line finder advances the Post-Bill past the previously-printed area, and prints only the last transaction's contents as a continuation of the previous Post-Bill. Then, it is issued each time when the track is closed, the Post-Bill can be used as a Check-Out Bill. However, Item Track System has a Check-Out Bill function so that Post-Bill is not used as a Check-Out Bill normally.

Subtotal Bill (See Sample 2 on the next page.)
Subtotal Bill shows the temporarily closed track's contents on a receipt or on a slip if programmed to use. If the slip printer is not programmed to use, an entire subtotal bill is always issued on a receipt.

*** Subtotal Bill Format --- available when the slip printer is used**

Depending on programming, a Subtotal Bill is issued by one of two methods.
i) Always entire Subtotal Bill is printed on new slip.
ii) Additional transactions are printed as a continuation of the previous Subtotal Bill. This method is used to have a Check-Out Bill by issuing the Subtotal Bills.

*** Subtotal Bill Printed on Receipt**

Even if a slip printer is programmed to use, it is possible to print it on a receipt by **SLIP OFF** key depression. In this case, after **SLIP OFF** key depression, enter the track number and press **CHECK-OUT BILL** key.

[SLIP OFF] --- enter track # --- [CHECK -OUT BILL] --- Subtotal Bill is issued on receipt

Sample 1 Post-Bill --- available immediately after the track is closed

KEY ENTRY
BUFFER PRINT 1

POST-BILL (SLIP)

```
<. . . . . .1>
  Served by   CLERK NAME 00001

SALMON STEAK                          11.00
BEER                                   2.50
                   CURENT CHG         13.50
N.B                              13.50
                          QUANTITY       2
FEB17/2002#001-000001 19:13R  CLERK NAME 00001
```

If the "tax is calculated each time the track is closed by either **NEW BAL.** key or a media key" is programmed by [SF-16.g], then **BUFFER PRINT 1** key prints a post-bill with VAT data, **BUFFER PRINT 2** key prints a post-bill without VAT data.

Sample 2 Subtotal Bill (not available for Amount Track System)

Depends on programming [SF-83.a,b], it is issued one of two methods.

i) Always entire Subtotal Bill is printed on new slip --- any time can be issued

KEY ENTRY
1
CHECK-OUT BILL 1

SUBTOTAL BILL (SLIP)

```
<. . . . . .1>
  Served by   CLERK NAME 00001

SALMON STEAK                          11.00
BEER                                   2.50
SBTL                             13.50
                          QUANTITY       2
FEB17/2002#001-000001 19:13R  CLERK NAME 00001
```

- If "tax calculated temporarily and printed on subtotal bill (not for post-bill)" is programmed by [SF-16.f], temporarily calculated tax amounts are printed.
- If the "tax is calculated each time the track is closed by either **NEW BAL.** key or a media key" is programmed by [SF-16.g], then **CHECK-OUT BILL 1** key prints a subtotal bill with VAT data, **CHECK-OUT BILL 2** key prints a subtotal bill without VAT data.

ii) Additional transactions are printed as a continuation of the previous Subtotal Bill

By this method, Subtotal Bill can only be issued **one time** for each transaction. If additional items are registered but a Subtotal Bill need not be issued, the contents will be stored in memory.

Track # 1 is picked up and additional items are registered.

KEY ENTRY
1
TRACK #

SALMON STEAK
BEER
NEW BAL.

CHECK-OUT BILL

DISPLAY

```
 00001  13.50
```

SUBTOTAL BILL (SLIP)

```
<. . . . . .1>
  Served by   CLERK NAME 00001

SALMON STEAK                          11.00
BEER                                   2.50
SBTL                             13.50
                          QUANTITY       2
FEB17/2002#001-000001 19:13R  CLERK NAME 00001
<. . . . . .1>
  Served by   CLERK NAME 00001
SALMON STEAK                          11.00
BEER                                   2.50
SBTL                             27.00
                          QUANTITY       4
FEB17/2002#001-000002 19:30R  CLERK NAME 00001
```

b) Picking Up a Track & Closing a Track Finally

< Picking Up a Track >

To pick up a track, enter the track number and press **TRACK #** key.

enter track # --- [TRACK #] --- previous balance with track # is displayed

< Closing a Track Finally >

Enter registrations as normal and then, it can be closed finally through one of a **Media** (Total) keys.

open track --- register items --- [TTL] --- Track is finally closed
Check-Out Bill must be issued by the **CHECK-OUT BILL** key.

< Issuing a Check-Out Bill >

Depending on programming [SF-83.a,b], a Check-Out Bill is issued on a slip by one of three methods (see Samples on the next page). However, if no Subtotal Bill has been issued, the entire Check-Out Bill is always printed, regardless of programming.

i) Always **entire Check-Out Bill** is printed on new slip.

ii) If only a closing operation is done since the last Subtotal Bill issue, **only the closing line is printed as a continuation of the Subtotal Bill**. If additional registrations have been done, **entire Check-Out Bill** is printed on new slip.

iii) Additional registrations are always printed as a continuation of the previous Subtotal Bill.

*** Check-Out Bill Keys**

CHECK-OUT BILL 1: Prints a check-out bill with VAT data on slip or receipt
CHECK-OUT BILL 2: Prints a check-out bill without VAT data on slip or receipt

*** Check-Out Bill Issue Cancellation**

If a check-out bill issue is not necessary, it can be skipped by a key depression or by programming.

media closing --- [BILL CANCEL] or "without check-out bill issue" has been programmed

*** Check-Out Bill Printed on Receipt**

Even if a slip printer is programmed to use, it is possible to print it on a receipt by **SLIP OFF** key depression.

[SLIP OFF] --- [CHECK -OUT BILL] --- Check-Out Bill is issued on receipt

i) Always entire Check-Out Bill is printed on new slip.

```
KEY ENTRY                                  RECEIPT
1                                          <......1>          27.00
TRACK #                                    TEA                 3.00
                                           COFFEE              2.50
TEA                                        CURENT CHG          5.50
COFFEE                                     CASH     32.50
                                           QUANTITY            2
CASH                                       #001-000003        20:30R
                                                CLERK NAME 00001

                          CHECK-OUT BILL (SLIP)
CHECK-OUT BILL 1          CHECK OUT BILL                                  Check-out bill header
                                                                          printed by [SF-6.b]
                          <.....1>
                            Served by   CLERK NAME 00001

                          2 X 11.00 SALMON STEAK                 22.00    Items are consolidated by
                          2 X 2.50 BEER                           5.00    [SF-67.h]
                          TEA                                     3.00
                          COFFEE                                  2.50
                          CASH                              32.50
                                                 QUANTITY         6
                          FEB17/2002#001-000003 20:30R  CLERK NAME 00001
```

ii) When a final closing operation is done since the last Subtotal Bill issue, a closing line only is printed on the last Subtotal Bill. If additional registrations have been done, entire Check-Out Bill is printed on new slip.

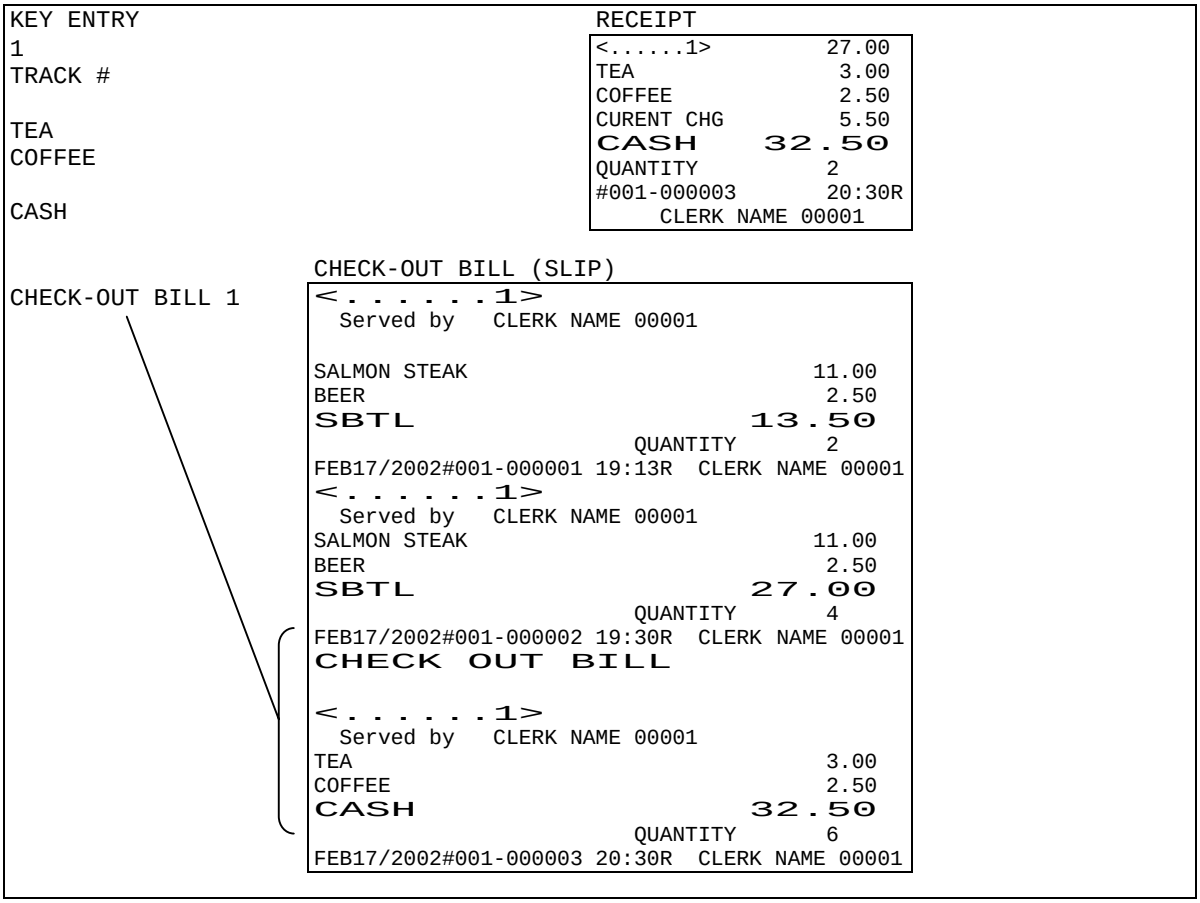
The automatic line finder advances the slip paper past the previously-printed area, and prints only the closing lines (the check-out bill header if programmed, media amount and tax data, etc.) on the bill.

```
KEY ENTRY                  CHECK-OUT BILL (SLIP)
1 TRACK #                  <.....1>
CASH                         Served by   CLERK NAME 00001

                           2 X 11.00 SALMON STEAK                 22.00
                           2 X 2.50 BEER                           5.00
                                                  QUANTITY         4
CHECK-OUT BILL 1           FEB17/2002#001-000002 19:30R  CLERK NAME 00001
                           CHECK OUT BILL
                           <.....1>
                             Served by   CLERK NAME 00001
                           CASH                          27.00
                                                  QUANTITY         4
                           FEB17/2002#001-000003 21:30R  CLERK NAME 00001
```

If a Subtotal Bill has not been issued previously, **entire Check-Out Bill** is always issued.

iii) Additional registrations are always printed as a continuation of the previous Subtotal Bill.



If a Subtotal Bill has not been issued previously, **entire Check-Out Bill** is always issued.

c) Track Transfer to a Designated Track

Track transfer is done using **NEW BAL.** key and **CASH/TTL 5** key if permitted by programming [SF-15.b].

Transfer can be canceled by pressing **CL** key at any time instead of **CASH/TTL 5** key.

When the clerk track assignment system is used by [SF-16.a], only the assigned clerk can transfer his/her own track to another track that is assigned to him/her.

track # transferred from --- **NEW BAL.** --- track # transferred to --- **NEW BAL.** --- **CASH TTL 5**

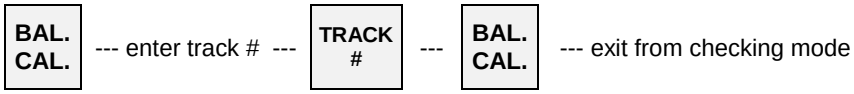
Track #10 is transferred to Track #15

KEY ENTRY	DISPLAY	CONFIRMATION RECEIPT
10 NEW BAL.	┌000010┘ 5.00	<.....10> -> <.....15>
15	┌000┘ .15	#001-000023 09:10R
NEW BAL.	┌010┘-┐┌01.5┘	CLERK NAME 00001
CASH/TTL 5		

d) Track Balance Calculation (display only)

< Track Balance Checking >

This function is used to check a track balance on the display.
Press **BALANCE CALCULATION** key and enter the track number as follows:



KEY ENTRY	DISPLAY	
BALANCE CAL.	⊣ . 0	enter into the balance calculation mode
7 TRACK #	⊣ 5.00	the balance of track #7 is displayed
BALANCE CAL.	= 5.00	exit from the balance calculation mode

< Track Balance Additions >

Also, a track's subtotal can be displayed and another track's subtotal may be added with the total being displayed. It is then possible to divide by the number of people. Tracks are not consolidated.

KEY ENTRY	DISPLAY	
BALANCE CAL.	⊣ . 0	enter the balance calculation mode
7 TRACK #	⊣ 5.00	the balance of track #7 is displayed (5.00)
8 TRACK #	⊣ 13.00	the balance of track #8 (8.00) is added to track #7 and the total balance amount is displayed (13.00)
2 [X2]	⊣↵ 6.50	the total balance (13.00) is divided by 2 and the result (6.50) is displayed
BALANCE CAL.	= 6.50	exit from the balance calculation mode

B. Amount Track System [SF-15.c=1]

This system records transaction totals only. The registered items per track can not be recorded.
All functions, except Check-Out/Subtotal Bill issues, are the same as the item track system.

< Opening a New Track >

Enter a sequential track number (1 ~ 30) and press **TRACK #** key.

enter track # --- [TRACK #] --- new track number is assigned

A track number may be assigned at anytime while in a transaction.

< Closing a Track Temporarily >

Enter registrations as normal and then, it can be closed temporarily through **NEW BAL.** key.

open track --- register items --- [NEW BAL.] --- Amount Track is temporarily closed
Post-Bill can be issued if required by **BUFFER PRINT** key

< Picking Up an Amount Track >

To pick up a track, enter the track number and press **TRACK #** key.

enter track # --- [TRACK #] --- previous balance with track # is displayed

< Closing an Amount Track Finally >

Enter registrations as normal and then, it can be closed finally through one of a **Media** (Total) keys.

open track --- register items --- [TTL] --- Amount Track is finally closed
Post-Bill can be issued if required by **BUFFER PRINT** key

Amount Track System

KEY ENTRY	DISPLAY	RECEIPT	
1	┌0000001┘ .	<.....1> .00	
TRACK #		SALMON STEAK 11.00	
SALMON STEAK		BEER 2.50	current charge printed by [SF-15.d]
BEER		CURENT CHG 13.50	
NEW BAL.		**N.B 13.50**	
		QUANTITY 2	
BUFFER PRINT 1	--- see below *1	#001-000002 19:14R	
for post-bill		CLERK NAME 00001	
1	┌00001┘ 13.50	<.....1> 13.50	
TRACK #		CAKE 1.50	
CAKE		COFFEE 1.50	
COFFEE		CURENT CHG 3.00	
CASH		**CASH 16.50**	
		QUANTITY 2	
BUFFER PRINT 1	--- see below *2	#001-000016 20:14R	
for post-bill		CLERK NAME 00001	

< Post-Bill > --- shows the last transaction's contents

Immediately after temporarily closing a track transaction, if either **BUFFER PRINT 1 or 2** key is pressed, a post-bill is issued on a receipt in the receipt-off condition or on a slip if programmed to use.

*** Automatic Line Finder**

If a Post-Bill of the track has been issued previously, the automatic line finder advances the Post-Bill past the previously-printed area, and prints only the last transaction's contents as a continuation of the previous Post-Bill. So that the Post-Bill can be used instead of the Check-Out Bill for the item track system which is not available for the Amount Track System.

POST-BILL (SLIP)

```
<.....1>
  Served by  CLERK NAME 00001

SALMON STEAK                          11.00   *1
BEER                                   3.00
                    CURENT CHG        13.50
N.B                             13.50
                         QUANTITY      2
FEB19/2002#001-000002 19:14R  CLERK NAME 00001
<.....1>
  Served by  CLERK NAME 00001

CAKE                                   1.50   *2
COFFEE                                 1.50
                    CURENT CHG         3.00
CASH                            16.50
                         QUANTITY      2
FEB19/2002#001-000016 20:14R  CLERK NAME 00001
```

28. Previous Balance Plus (PB+) / Previous Balance Minus (PB-)

The PB+/PB- can be used in place of track operations when the track memory is full.

These operations are similar to track operations in that they allow for intermittent registrations however no track numbers are used. In other words, the ECR does not retain data on individual items registered. Also, the automatic line finder on the slip printer is inoperative, however, the manual line finder can be used.

KEY ENTRY	DISPLAY	RECEIPT
100 MESSAGE	1.00	CUSTOMER 100#
PB+	□ . 0	PB.P .00
BANANA CAKE	PL 1.25	BANANA CAKE 1.25
NEW BAL.	nb 1.25	N.B 1.25
		QUANTITY 1
		#001-000024 15:42R
		CLERK NAME 00001

MESSAGE key symbol #38

BUFFER PRINT 1 --- bill is printed on the slip (see below * 1)

100 MESSAGE	1.00	CUSTOMER 100#
125 PB+	□ 1.25	PB.P 1.25
ICE CREAM		ICE CREAM 2.00
CASH		CASH 3.25
		QUANTITY 1
		#001-000025 15:55R
		CLERK NAME 00001

PB- key is used for a negative previous balance.
The balance must be entered before pressing **PB-** key.

< Manual Line Finder Operation >

Input the line number from where printing should start and press **BUFFER PRINT** key. The input line number should not be more than the preprogrammed maximum number of lines on the slip. Bills which are issued by the manual line finder operation do not have a slip logo.

10 lines are fed by the manual line finder operation.

KEY ENTRY

10
BUFFER PRINT 1 --- *2

POST-BILL is used as CHECK-OUT BILL

```
 1  Served by   CLERK NAME 00001
 2
 3                                   CUSTOMER
 4                                        100#
 5  PB.P                                .00
 6  BANANA CAKE                        1.25
 7  N.B                                1.25
 8                          QUANTITY       1
 9  FEB19/2002#001-000024 15:42R  CLERK NAME 00001
10
```

*1
logo is printed by [SF-83.d]

```
   Served by   CLERK NAME 00001
                                    CUSTOMER
                                         100#
   PB.P                             1.25
   ICE CREAM                           2.00
   CASH                             1.25
                           QUANTITY       1
FEB19/2002#001-000025 15:55R  CLERK NAME 00001
```

*2
logo is not printed

29. Ticket System

If the ECR is programmed for the ticket system [SF-1.b], all items will be ticket items. When items are registered, tickets are issued depending on one of three ticket issue types (real-time, after closing, mixed ticket) by [SF-3.g,h]. Then, when the transaction is closed, a post-receipt is issued by [SF-2.b].

A PLU can be programmed to either of following two types by [PF-3.f];

Ticket Item	1 to 7 tickets can be issued for an item independently by flag selection [PF-3.b,c,d]
Combined Item	items are printed on one ticket

There are following ticket issue types to be selected by [SF-3.g,h];

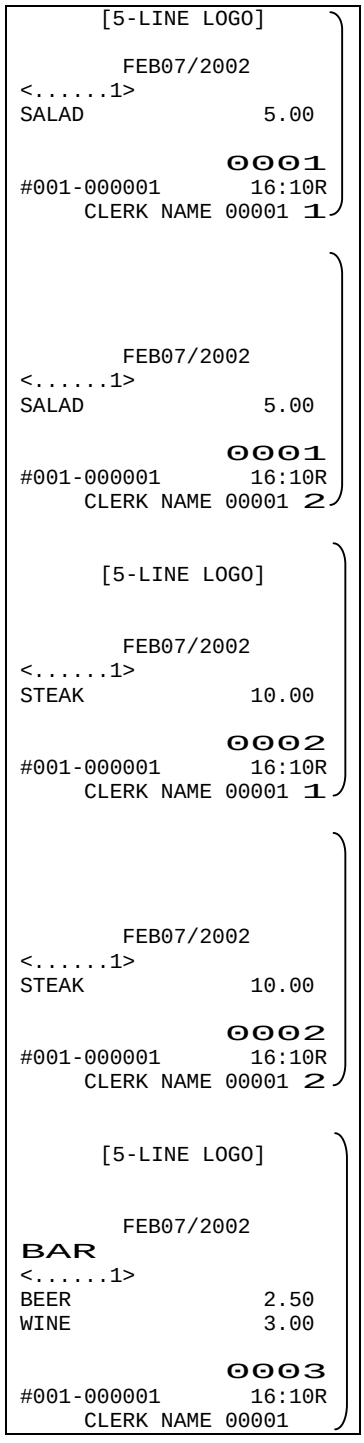
Real-Time Ticket	ticket items are printed in real-time and one combined ticket is printed after transaction closing
After Closing Ticket	one ticket is issued containing all ticket items in real-time, then remaining number of tickets and one combined ticket are issued after transaction closing
Mixed Ticket	two kinds of combined ticket are printed
Multiple Ticket	number of tickets entered by **X1** key is printed (available if real-time ticket type is used)

Ticket Print Contents

Ticket header 1	printed on the first combined ticket of "after closing ticket" or "mixed ticket" by [SF-3.f]
Ticket header 2	printed on a combined ticket which is printed after closing transaction by [SF-3.f]
Consecutive ticket #	printed by [SF-2.a]
Ticket number per item	separate from the consecutive ticket number is printed to distinguish 2 to 7 tickets for an item
Track number	printed in brackets < Track # > if entered
Table number	printed in * Table # * if entered

a) Real-Time Ticket Sample

Ticket items printed in real-time for programmed number of tickets.
Automatic track number method is used on this sample.



```
      [5-LINE LOGO]

        FEB07/2002
<......1>
SALAD              5.00

                0001
#001-000001       16:10R
     CLERK NAME 00001 1


        FEB07/2002
<......1>
SALAD              5.00

                0001
#001-000001       16:10R
     CLERK NAME 00001 2


      [5-LINE LOGO]

        FEB07/2002
<......1>
STEAK             10.00

                0002
#001-000001       16:10R
     CLERK NAME 00001 1


        FEB07/2002
<......1>
STEAK             10.00

                0002
#001-000001       16:10R
     CLERK NAME 00001 2


      [5-LINE LOGO]

        FEB07/2002
BAR
<......1>
BEER               2.50
WINE               3.00

                0003
#001-000001       16:10R
     CLERK NAME 00001
```

REAL-TIME TICKET

< track number >

consecutive ticket number (printed by [SF-2.a])

ticket number per item

no logo printed on the 2nd ticket

same consecutive ticket number is printed for 1st & 2nd tickets of two-ticket item

ticket number per item

COMBINED TICKET

printed after closing

ticket header 2 (printed by [SF-3.f])

For example,

1) After a customer orders at a table, the clerk enters the order into ECR.

2) The clerk brings the item tickets for food to the kitchen and the combined ticket for drink to the bar.

3) When the orders are prepared, the cook puts the 1st ticket in the "completed order box" and the 2nd ticket with the dish. Then the clerk carries them with the tickets to the customer's table. The tickets are used for the clerk's confirmation, for internal management, etc.

POST-RECEIPT

```
      [5-LINE LOGO]

        FEB07/2002
<......1>
Served by
CLERK NAME 00001
BEER               2.50
WINE               3.00
SALAD              5.00
STEAK             10.00
CASH      20.50
QUANTITY           4
#001-000001       16:10R
     CLERK NAME 00001
```

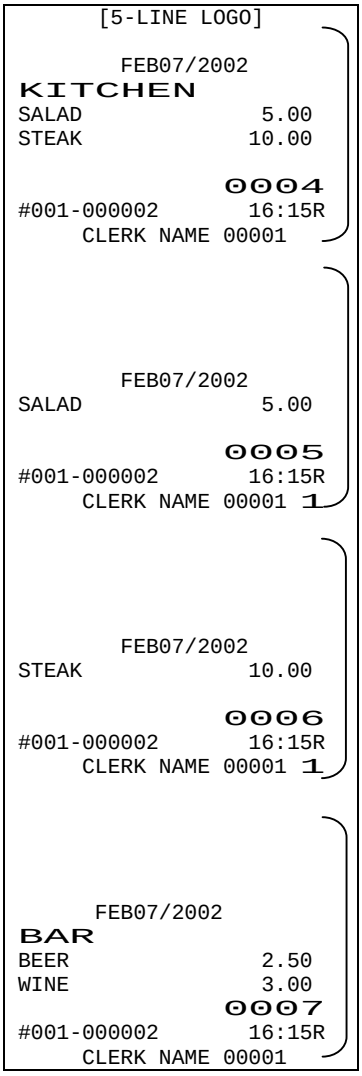
salad & steak --- two-ticket item for food
beer & wine --- combined item for drink

Receipt consecutive #s are not printed on the tickets under clerk interrupt system.

b) After Closing Ticket Sample

All ticket items are printed on the first combined ticket in real-time (a), then the remaining number of tickets (b) and original combined ticket items are printed on the second combined ticket (c).

Manual track number method is used on this sample.



1st COMBINED TICKET (a)

ticket header 1 (printed by [SF-3.f])

consecutive ticket number (printed by [SF-2.a])

2nd ticket of two-ticket item (b)

no logo printed

These tickets are printed after closing.

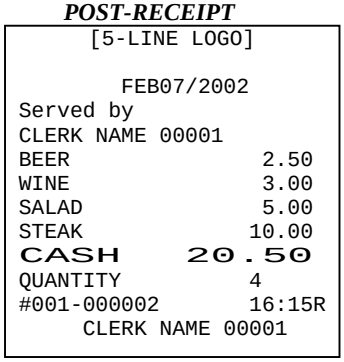
ticket number per item

2nd ticket of two-ticket item (b)

2nd COMBINED TICKET (c)

ticket header 2 (printed by [SF-3.f])

POST-RECEIPT



salad & steak --- two-ticket item for food
beer & wine --- combined item for drink

Receipt consecutive #s are not printed on the tickets under clerk interrupt system.

For example,

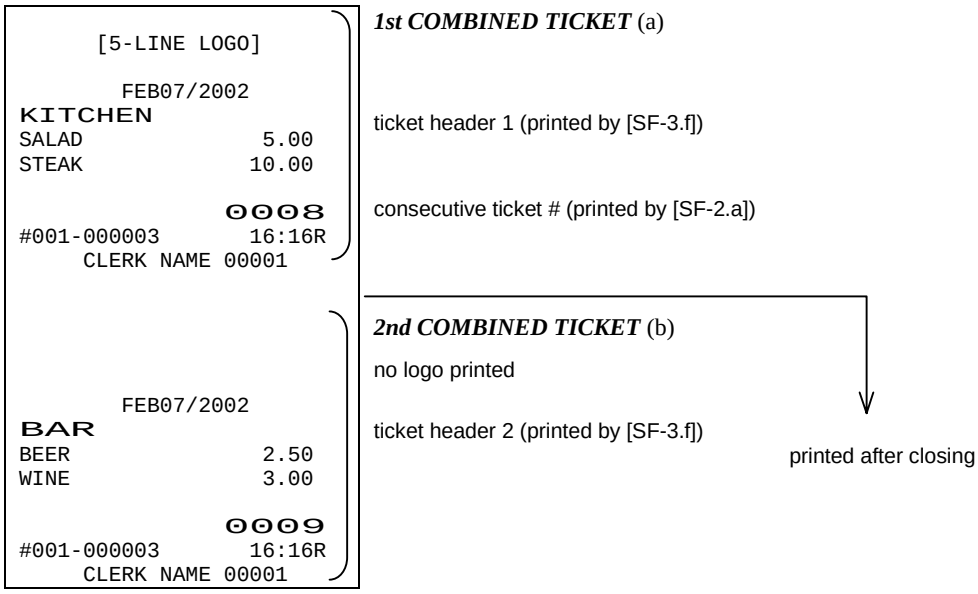
1) The clerk brings the 1st combined ticket and 2nd item tickets for food to the kitchen and the 2nd combined ticket for drinks to the bar.

2) When the orders are prepared, the cook puts the 2nd ticket with the dish and crosses the item out on the 1st combined ticket. Then the clerk carries the dish with the ticket to the customer's table.

3) When all dishes are prepared, the 1st combined ticket goes into the "completed order box".

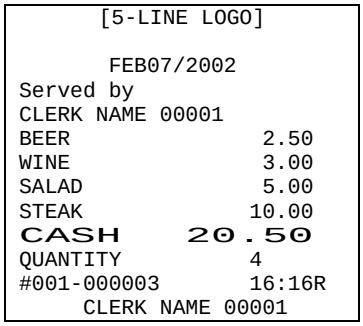
c) Mixed Ticket Sample (two kinds of combined ticket)

The number of tickets programmed for ticket item is ignored and ticket items are printed on the first combined ticket (a). Original combined ticket items are printed on the second combined ticket (b) after a transaction closing.



Receipt consecutive #s are not printed on the tickets under clerk interrupt system.

POST-RECIEPT



salad & steak --- two-ticket item for food (Two-ticket item settings are disregarded.)
beer & wine --- combined item for drink

d) Multiple Ticket Sample

The multiple ticket is issued by entering the number of tickets and pressing **X1** key. This function is operative only when **real-time ticket issue** and **ticket PLU** have been selected. The number of tickets programmed will be ignored.

OPERATION

enter number of tickets --- **X1** --- enter ticket PLU

```
      [5-LINE LOGO]

        FEB07/2002

ADMISSION          5.00

                 0010
#001-000004       16:17R
     CLERK NAME 00001
```

consecutive ticket # (printed by [SF-2.a])

```
      [5-LINE LOGO]

        FEB07/2002

ADMISSION          5.00

                 0011
#001-000004       16:17R
     CLERK NAME 00001
```

```
      [5-LINE LOGO]

        FEB07/2002

ADMISSION          5.00

                 0012
#001-000004       16:17R
     CLERK NAME 00001
```

Receipt consecutive #s are not printed on the tickets under clerk interrupt system.

POST-RECEIPT

```
      [5-LINE LOGO]

        FEB07/2002
Served by
CLERK NAME 00001
3 X 5.00
ADMISSION         15.00
CASH     15.00
QUANTITY          3
#001-000004       16:17R
     CLERK NAME 00001
```

e) Other Notes for Ticket

TICKET OFF key

If **TICKET OFF** key is pressed at the beginning of a transaction, the following registered ticket items will become a normal registration for one transaction.

PLU with Link PLU

Link PLU is printed on the same ticket of the main PLU. The ticket setting for the link PLU belongs to the main PLU.

Simple Condiment PLU

The ticket setting for the simple condiment PLU is independent of the main PLU setting. It is not printed on the same ticket of the main PLU.

Track # in non-clerk interrupt system
Table # in clerk interrupt system

Track # or Table # should be entered at the beginning of a transaction to print it on the ticket.

Automatic Post-Receipt

1. The automatic post-receipt is issued or is not issued after ticket issue by [SF-2.b]. If **RECEIPT OFF** key has been pressed, the automatic post-receipt is not issued on a receipt until **BUFFER PRINT** key is pressed. However, if the "automatic slip print" has been selected and a paper has been inserted, the post-receipt is issued automatically on a slip.
2. Also, "automatic receipt of track permitted/prohibited" can be programmed by [SF-1.a]. So if you would like to prohibit only receipt issue after ticket issue for ticket items in a track, set [SF-1.a=1] and [SF-2.b=0].

Ticket Printed on Kitchen Printer --- this function is independent from the ticket system.

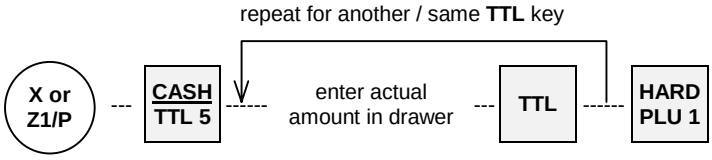
Separately from ticket printing on the receipt, if "ticket printed on KP" is programmed by [SF-3.e], tickets are printed on KP having a header of the kitchen printer. If the ticket system is also programmed, tickets are printed on KP and receipt. By programming you can control whether or not to print certain ticket items on KP/receipt printer.

Notes.

- Normal KP function is **not** available.
- "Ticket printed on KP" function never has an automatic receipt after KP ticket issue but it always has a receipt at real-time. So if you wish to prohibit a real-time receipt issue when "ticket printed on KP" function is used, set the following flags:
  [SF-1.b=1] Ticket System
  [SF-3.e=1] Ticket printed on KP
  [SF-2.b=1] Automatic receipt prohibited after ticket issue
  [PF-5.g=1] This ticket item is printed on KP
- If you wish to prohibit a real-time receipt issue for a track only when "ticket printed on KP" function is used, set [SF-2.b] to 0 and set [SF-1.a] to 1.
- Tickets on KP do not have ticket headers, consecutive ticket number and ticket number per item.
- Paper cutting method is fixed to either partial cut or full cut by printer setting. (TP-422 only)
- Simple Condiment PLU is printed in red (in slim characters when mono-ribbon is used) with main PLU while it is printed separately from main PLU on the ticket printed on the receipt.
- Link PLU is printed with a link PLU symbol with a main PLU, like on the receipt.
- Multiple ticket entry by **X1** key is not available.

30. Cash Declaration

At the end of the day, confirm the cash in drawer amount using 'cash declaration'. A cash declaration receipt shows any discrepancies between the amount of cash that is supposed to be in the drawer and what is actually there is issued.



Even if the Cash Declaration is done at the Z1/P position, the CID amount is **not** reset. It will be reset by Z-08 CID report.

KEY ENTRY	DISPLAY	RECEIPT	
CASH/TTL5	Cd . 0	CASH 30.00	actual amount in drawer
3000 CASH	5 30.00	TOTAL 30.00	
H.PLU 1	Cd 30.00	CID 30.00	amount in CID memory
		.00	difference

Media multiplication is available for preset tender media keys.

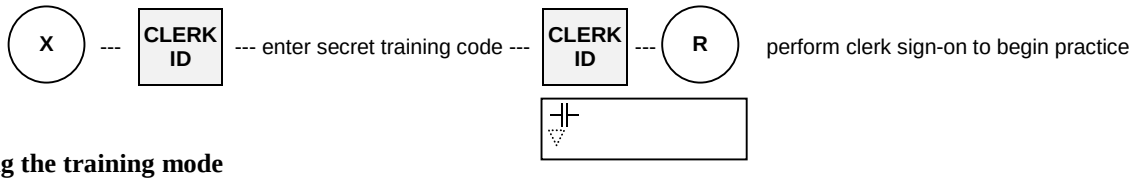
This sequence is printed on X/Z-08 CID report by [SF-27.b].

VI. TRAINING

Training mode is used for teaching ECR operations without affecting the memories of normal transactions, tracks and programming. In the training mode, reports can not be issued and ECRs can not initiate communication with other machines. However, except during a transaction, the memory of an ECR in the training mode can still be accessed by other ECRs in the IRC system.

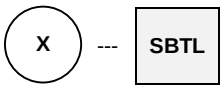
Entering the training mode

The training message is displayed once and the REG lamp flashes continuously during the training. Entering the training mode automatically signs off the currently signed-on clerk.



Exiting the training mode

Exiting the training mode automatically signs off the currently signed-on clerk.



KEY ENTRY / DISPLAY / RECEIPT

(Entering training mode)

(Clerk Sign-On) — C-01

STEAK — PL 15.00

BEER — PL 2.50

CASH — 5 17.50 ▼

```
******  TRAINING *******
STEAK               15.00
BEER                 2.50
CASH      17.50
QUANTITY             2
******  TRAINING *******
#001-000500       13:13R
     CLERK NAME 00001
```

training message / training message

SLIP

```
*****      TRAINING     ****
  Served by   CLERK NAME 00001

STEAK                          15.00
BEER                            2.50
CASH                       17.50
                     QUANTITY      2
*****      TRAINING     ****
FEB17/2002#001-000500 13:13R  CLERK NAME 00001
```

training message / training message

Notes for the training mode

- A programmable training message is printed on the journal, receipts, validations and slips.
- The consecutive number is not incremented.
- The training mode has its own track memory separate from the regular track memory. The memory is erased when exiting the training mode.
- Training count, amount and training grand total (GX) are printed on the transaction reports (01 ~ 04). Training grand total, GX, is printed after grand totals G1 and G2. GX includes the amounts of all transactions done in the training mode, and is not resettable.

VII. PRINT CONTENTS

1. Journal Print Contents

Either the normal journal contents or selective journal contents can be printed by programming [SF-6.c]. Also, if programmed by [SF-6], the messages for power-off/-on times, initial reset times and cleared figures (with * symbols) can be printed on the journal.

Normal Journal Contents	Selective Journal Contents
exactly the same way as the receipt contents are printed and logo is printed by [SF-2.g,h]	only the tax line and media closing lines are printed by [SF-6.c]

2. Receipt / Slip Print Contents

Besides the transaction items, the following items are printed on the receipt and slip. However, even though the contents are equal, the format varies for the slip.

- 5-line receipt upper logo, 5-line slip upper logo
- date (English month name: mmdd/yyyy or ddmm/yyyy, Numeric month name: mm/dd/yyyy or dd/mm/yyyy) [SF-7.e,f]
- message (if entered)
- PLU descriptor, PLU price
- PLU supplementary message (printed above a PLU descriptor)
- cooking message (printed under a PLU descriptor)
- PLU code (normal or double-width character by [SF-68.h])
- PLU link group-A descriptor [SF-68.e]
- amount due (normal or double-width character by [SF-7.d])
- tax data [SF-22]
- item quantity [SF-6.d]
- number of people (if entered)
- last line: 3-digit machine #, 6-digit consecutive receipt # (normal/double-width character [SF-7.b]), 2-digit clerk symbol by [SF-11.a], time [SF-7.h for receipt/journal, SF-83.c for slip], control mode & clerk name
- 5-line receipt lower logo, 5-line slip lower logo (not available for TP-620)

3. Post-Receipt

When the ECR is in the receipt-off condition and the ECR is **not** programmed for use with a slip printer, the last transaction's data can be printed by pressing **BUFFER PRINT** key after closing the transaction. If the ECR is programmed for use with a slip printer, the post-receipt is printed on the slip.

Addition to Post-Receipt, Second Receipt is printed by **BUFFER PRINT** key if permitted by programming [SF-1.d] and when the ECR is **not** programmed for use with a slip printer.

PROGRAMMED AS	RECEIPT-ON	RECEIPT-OFF
Second Receipt permitted	1 receipt + 1 second receipt by **BP** key *	1st post-receipt by **BP** key 2nd post-receipt by **BP** key *
Second Receipt prohibited	1 receipt + no second receipt	1 post-receipt by **BP** key

* Second receipt message is printed by [SF-8.g] under the date.

VIII. REPORTS

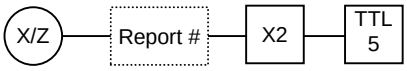
REPORT SEQUENCE

Set the control key to **X, Z1 or Z2 position** and use the report sequence below;

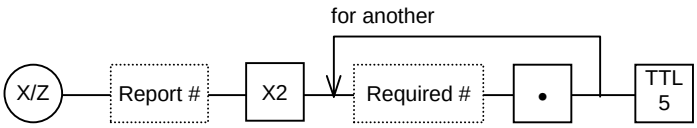
- 1st level for daily report : X (read only) position or Z1 (reset) position
- 2nd level for periodic report : X (read only) position or Z2 (reset) position

For Z report issue and report format, there are some programming restrictions. Refer to system function flags [SF-26~29] and the clerk security function flags.

FULL REPORT



INDIVIDUAL REPORT



PLU report: Scanner can be used for entering the required #.
Clerk report: Enter the sequential clerk number (not secret clerk code).

SEQUENTIAL REPORT

PLU report: Enter PLU codes for the start and end numbers.
Scanner can be used also.

TRANSACTION REPORT	REPORT #		REPORT SEQUENCE		
	1st level (X / Z1)	2nd level (X / Z2)	Full	Individual	Sequential
Auto Full Transaction	1	2	o		
Full Transaction (**X position** only)	X-3	X-4	o		
Hourly	5	6	o		
Grand Total 1	---	7	o		
Cash In Drawer	8	---	o		
EFT Terminal Data Transfer & Reset (**Z position** only) See note below.	Z1-9	---	o		
Clerk	10	11	o	o	
Main Group-A	20	21	o		
Group-A per Main Group-A	22	23	o	o	
Group-A	25	26	o	o	
Group-A Stock	---	27	o		
Group-B	30	31	o	o	
PLU	40	41	o	o	o
PLU Stock	---	42	o	o	o
Non-Active PLU (**X position** only)	X-43	X-44	o		
Menu 1 PLU (**X position** only)	X-50	X-51	o		
Menu 2 PLU (**X position** only)	X-52	X-53	o		
Menu 3 PLU (**X position** only)	X-54	X-55	o		
Group-A PLU	56	57	o	o	
Group-B PLU	58	59	o	o	
Track Total (**X position** only)	X-60	---	o	o	o
Track (set [SF-29.a] for Z report)	62	---	o	o	
Clerk Balance	70	---	o	o	
ESF Status (issued when [SF-78.a=1])	79	---	o		

Note: Z1-9 report is <u>not</u> available when Celectronic terminal is used. By issuing this report, the data in the EFT terminal is transferred to the host terminal and the data is cleared.

Set the control key to **X position** for all program dumps except for clerk dump.

PROGRAM DUMP	REPORT #	REPORT SEQUENCE		
		Full	Individual	Sequential
Full Program	80	o		
Main Group-A	81	o		
Group-A	82	o		
Group-B	83	o		
Key Layout	84	o		
Function (refer to next page for individual report) Ruler for cheque printed on slip if [SF-57.d=1]	85	o	o	
Key & Symbol Name	86	o		
Tax	87	o		
PLU	88	o		o
Clerk (**Z2 position**)	Z2-89	o		
Menu Layout	90	o		
Hard Clerk Key	94	o		

Required # for Individual Function Program Dump (X-85)

#	Report Contents
1	system function flag
2	media currency symbol media name foreign currency exchange rate media function flag preset tender key amount
3	number of programmed PLUs PLU modifier value
4	terminal address
5	slip printer ID number
10	clerk name
20	% rate
21	discount amount
22	plus amount
23	adjustment rate
24	cheque-cashing/currency exchange rate Euro currency exchange rate
25	PLU sales commission rate
26	PLU stock rate stock unit name
40	arrangement key sequence
41	cheque printing data

IRC REPORTS

(Collecting Transaction Data from Slaves)

There are two kinds of IRC reports issued by the master ECR;

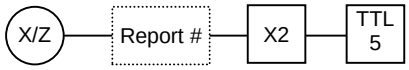
One is a ***consolidated report*** for all ECR's sales data and

the other is an ***individual report***, by designating the slave ECR by using the sequence below;

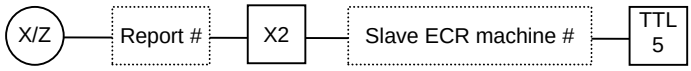
Set the control key to **X, Z1 or Z2 position**.

- 1st level for daily report : X (read only) position or Z1 (reset) position
- 2nd level for periodic report : X (read only) position or Z2 (reset) position

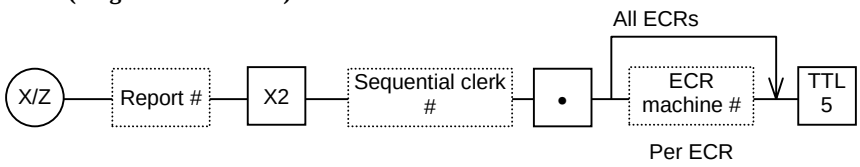
CONSOLIDATED (ALL ECRs) REPORT



INDIVIDUAL (PER ECR) REPORT



SEQUENCE FOR X-8610/8611 (Single Clerk 1st/2nd) REPORTS



The master ECR can collect the slave ECR's sales data only when the slave ECR is in an idle condition (no other communication, no transaction). When the slave ECR is transmitting sales data to the master, the display shows "`-irc comm-NN`" and ECR locks until IRC communication stops.

The following IRC reports are printed on the master and slave ECRs respectively.

'IRC Z report printed or not printed' [SF-29.b] can be programmed also.

		Master prints	Slave prints
Consolidated X-report		a consolidated report	a confirmation report on journal only
Individual X-report		a designated slave's report	a confirmation report on journal only
Consolidated Z-report	printed [b=0]	own report and a consolidated report with IRC status	own report
	not printed [b=1]	own confirmation report and a consolidated report with IRC status	a confirmation report on journal only
Individual Z-report	printed [b=0]	a designated slave's report with IRC status	own report
	not printed [b=1]	a designated slave's report with IRC status	a confirmation report on journal only

IRC REPORT	REPORT #		REPORT SEQUENCE		
	1st level (X / Z1)	2nd level (X / Z2)	All ECRs consolidated	Per ECR individual	
Auto Full Transaction	8801	8802	o	o	
Hourly	8805	8806	o	o	
Grand Total 1	---	8807	o	o	
Cash In Drawer	8808	---	o	o	
Clerk	8810	8811	o	o	
Single Clerk (X position only)	X-8610	X-8611	o	o	
Main Group-A	8820	8821	o	o	
Group-A Stock	---	8827	o	o	Note 1
Group-B	8830	8831	o	o	
PLU	8840	8841	o	o	
PLU Stock	---	8842	o	o	Note 1
Track	8862	---	*	o	
Clerk Balance (X position only)	X-8870	---	*	o	
ESF Status	8879	---	*	o	Note 2

* The consolidated reports are not available for these reports. However, if PC communication module Tensai2000 is used as an IRC master, you can take the individual report from all ECRs at one time.

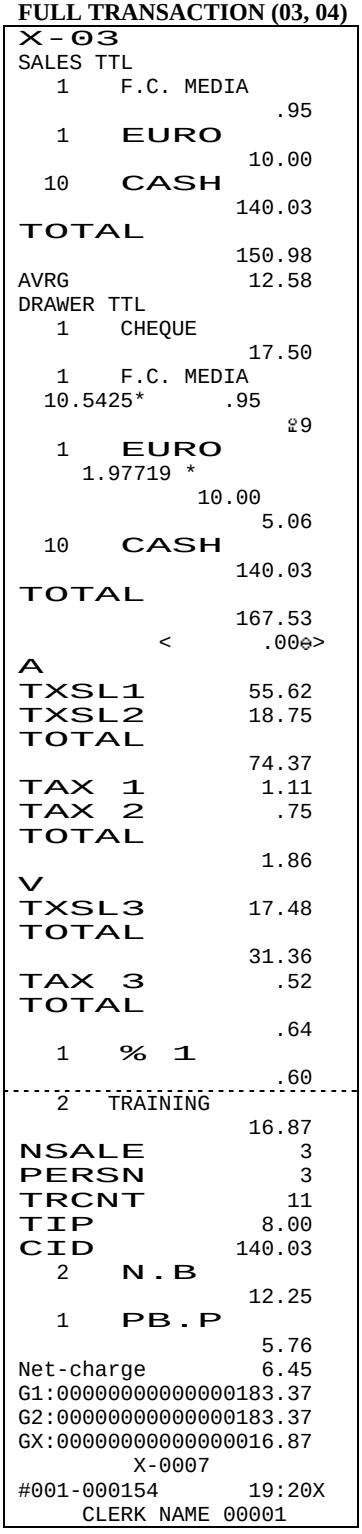
Note 1: Consolidated Z report: the stock of the slave ECRs are added to the master ECR's stock memory and cleared to zero.
Individual Z report: the stock of the designated slave ECR is **not added** to the master ECR's stock memory but it is cleared.
Both reports do not clear the master ECR's stock memory. Issue Z-27/42 reports on the master to clear.

Note 2: To issue ESF report 8879, "ESF function available [SF-78.a=1]" should be set on both the master and slave ECRs. When this individual report is taken, the slave's ESF data is always transmitted to the master.
X-8879: the master prints the ESF status but the slave prints IRC status only.
Z-8879: the master and slave print the ESF status only.

TRANSACTION REPORT SAMPLES

AUTO FULL TRANSACTION (01, 02)
Consists of two separate reports, Group-A (25, 26) and Full Transaction (03, 04). Refer to each report for details. Depending on programming [SF-26,27], issuing the Z-01 or Z-02 report will reset to zero any of the following data on each report where the data appears: "Cash in Drawer", "Consecutive Receipt/Ticket Number", "X Report Count" and "Grand Total 1".

FULL TRANSACTION (03, 04)



Media Amount in Sales
media count
media amount

calculated Euro amount in local currency

average sales per person (sales amount divided by number of persons entered in transactions)
Media Amount in Drawer

foreign currency exchange rate, calculated local currency media amount
media amount in foreign currency

Euro currency rate
temporarily calculated amount in local currency by actual amount in Euro currency
actual amount in Euro currency (Euro currency symbol is printed if [SF-65.b=0].)

rounding error (arises because of difference when calculating back and forth for a currency exchange rate)
Symbol A for tax calculated by Add-on Tax method
taxable subtotal amount

total taxable subtotal

tax amount

total tax amount
Symbol V for tax calculated by VAT method

VAT amount is "re-calculated from the taxable subtotal at report taking" or "calculated at registration are accumulated and printed" by [SF-30.d].

count and amount of: %, discount, plus, adjustments, P/O, R/A, void, refund, transaction void, cheque cashing

training count, amount

no sale count
number of people
transaction count
tip amount
cash in drawer amount
new balance count, amount (printed if [SF-27.g=0])

previous balance count, amount (printed if [SF-27.g=0])

net-charge
grand total 1
grand total 2
training grand total
X-report count
M/C #, consecutive #, time & mode
clerk name

Media Amount in Sales
Amount sold in each media. This amount does not include no sale transactions (P/O, R/A, cheque-cashing, etc.) and results of rounding.

Media Amount in Drawer
Actual amount in drawer. This amount includes no sale transactions (P/O, R/A, cheque-cashing, etc.) and results of rounding. When no sale transactions are done, the amounts will be added to the memory, but the media count will not be changed.
Differences between media amount in sales and media amount in drawer arise when payment is in one media and change is in another or as a result of rounding. For example, a customer gives a 100.00 cheque for a 60.00 charge. Change is 40.00 in cash. Then, media amount in sales adds 60.00 to cheque memory. Media amount in drawer adds 100.00 to cheque memory and subtracts 40.00 from cash memory.

Foreign Currency Media Amount in Drawer
When a media has been used for a foreign currency, the media in drawer memory stores the foreign currency value. The printed local currency amount is temporarily calculated by the memorized foreign currency value. The difference between the actual sales amount and the calculated local currency amount arises because of the difference when calculating back and forth for a currency exchange rate. This difference is printed under the total amount, within brackets < >.

For example, when a sales amount of 1.00 (decimal point is disregarded on calculation) is closed by a **F.C. MEDIA** key which has a preset exchange rate of 10.5425*,

* This exchange rate is calculated by "LC / FC". The calculation method "FC / LC" is also available depending on programming.

1. Foreign currency is calculated by dividing the due amount 1.00, in local currency, by the exchange rate 10.5425.
Local Currency to Foreign Currency :
LC / exchange rate = 100 / 10.5425 = 9.4854... = rounded to **9** (printed on the receipt)

At the same time, the FC amount 9 is converted to LC amount 95 (9 x 10.5425) and the difference **.05** between the actual sales 1.00 and the calculated LC amount .95 is stored in the rounding error (difference) memory and will be printed within brackets < > on the sales report.

2. The printed local currency amount **.95** on the report is calculated from the memorized foreign currency **9**.
FC x exchange rate = 9 x 10.5425 = 94.8825 = rounded to **95**

Tax
Printed by [SF-26.a]. When using the VAT system, the taxable subtotal can be programmed to include or not to include tax. When using the add-on tax system, the taxable subtotal does not include tax. If programmed, adjustment, %, plus and discount calculations will affect each taxable subtotal.

Tip
Total amount of all clerk' tips. Tip will also be added to a media memory by [SF-29.f].

Cash in Drawer Amount
Total of the media in drawer amounts that are programmed to be added to CID.

New Balance
The amount closed by **NEW BAL.** key and PB+/PB- operations. Includes tax and percentage calculations if tax and percentage are calculated on closing by **NEW BAL.** key. This amount does not reset to zero after the track or PB+/PB- operation is closed by a media key.

Previous Balance Plus
The count is the total number of times that a track was opened when the previous balance was either zero or positive and a PB+ was entered. The amount is the accumulation of positive previous balances that were picked up when a track was opened and an amount was entered by PB+ operations.

Previous Balance Minus
The count is the total number of times that a track was opened and a PB- was entered.
The amount is the accumulation of negative previous balances that were picked up when a track was opened and an amount was entered by PB- operations.

Net Charge
Net charge shows the total amount of all non-closed transactions. It is calculated from the new balance and the previous balances.

Grand Total
Grand Total 1 can be reset by issuing the Z-07 or Z-01 ([SF-27.a=1]). Grand Total 2 is the accumulated grand total. Grand Total X is the grand total of training transactions. Neither Grand Total 2 nor Training Grand Total X can be reset. If programmed by [SF-29], grand total is calculated by: each PLU amount, % amount, plus amount, discount amount and tax amount.

Report Count
There are three kinds of report counts: X (read only), Z1 (1st level read/reset) and Z2 (2nd level read/reset). Each Z count will be increased only when a Z-01/Z-02 report is issued or when any Z report is issued by [SF-26.b].

HOURLY (05, 06)

```
X-05
   14:00
      11          50.55
   15:00
       6          15.20
   16:00
       8          22.25
TOTAL
                  88.00
```

time period
sales quantity, amount

Hourly data is recorded in one of two ways by [SF-27.d].

1. **Number of registrations and net amount.**
   Each item registered -- even if it includes multiplication -- increases the count by 1. The net amount includes VAT tax, "%, amount (+)/(-) calculations on items" but does not include add-on tax amount, adjustment amount, "%, amount (+)/(-) calculations on subtotal".

2. **Number of transactions and gross amount.**
   Each time a transaction is closed by a media key, the count is increased by 1. The gross amount includes VAT tax, add-on tax, adjustment amount, "%, amount (+)/(-) calculations on both items and subtotal".

GRAND TOTAL 1 (07)
Max. 14 digits of grand total can be printed. However, "0" is filled on the left side so as to cover up to 19 digits on the report. Grand Total 1 can be reset by issuing the Z-07 or Z-01 ([SF-27.a=1]).

```
X-07
G1:00000000000000183.37
```

CASH IN DRAWER (08)
Total of the media in drawer amounts is printed if media are programmed to be added to CID memory.

```
X-08
CID           140.03
```

```
X-08
TTL 1            .00
TTL 2            .00
TTL 3            .00
TTL 4            .00
CASH          140.00
TOTAL         140.00
CID           140.03
                 .03
```

Media amounts in cash declaration sequence are printed with this report by [SF-27.b].

media amounts in cash declaration sequence
(even if the actual amounts per media are not entered, media amounts are printed)

CID amount
difference between actual amount in drawer and CID memory

CLERK (10, 11)

Contents of 1st level report (X/Z-10)
Each Clerk's Data
sequential clerk number, clerk name
transaction count, amount
AVRG: average sales per person (sales amount divided by number of persons entered in transactions)
S1~S4: sales commission 1 ~ 4 rate (each)
sales-type 1 ~ 4 PLU amount (each)
total amount of sales-type 1 ~ 4 PLUs
CM: total amount of commission
tip amount
counts/amounts
void
refund
transaction void
counts
no sale
clear
correction
person
media in drawer memory
media count, amount
total media amount
< rounding error >
counts/amounts
P/O
R/A
cash in drawer amount
All Clerk's Total
total transaction amount
S1~S4: total amount of each sales-type 1 ~ 4 PLU
total amount of sales-type 1~ 4 PLUs
void amount
refund amount
transaction void amount

Contents of 2nd level report (X/Z-11)
Each Clerk's Data
sequential clerk number, clerk name
transaction count, amount
AVRG: average sales per person (sales amount divided by number of persons entered in transactions)
CM: total amount of commission
tip amount
person count
All Clerk's Total
total transaction amount

Note: On the full report, some data with value of "0" will be skipped. On individual reports, all data (whether "0" valued or not) is printed.

Sales-Type 1 ~ 4 PLU Amount
All PLUs are categorized by sales-type 1 ~ 4. With a four-type clerk memory, the sales amounts of type-1 ~ 4 PLUs are listed separately from each clerk's transaction amount.

The sales-type 1 ~ 4 PLU amounts include or do not include the discount, plus and % amount on item by [SF-29.e]. These amounts on subtotal and adjustment amounts are always not included in the sales-type 1 ~ 4 PLU amounts. Also, when using the VAT system, the PLU amount can be programmed to include tax or not include by [SF-27.c]. When using the add-on tax system, the PLU amount does not include tax.

Total Amount of Commission
Commission amount is calculated by the sales-type 1 ~ 4 of each PLU by four respective commission rates. Only the total amount will be printed on the report.

The ECR does not have 1st level memory for commission. On the 1st level report, the commission is calculated by each sales-type when the report is issued. When the Z-report of 1st level clerk is issued, the commission is accumulated in the 2nd level. On the 2nd level report, the commission is calculated from the temporary 1st level amount plus the 2nd level memory amount.

Cash In Drawer Amount
The media in drawer amounts per clerk that are programmed to be added to CID.

MAIN GROUP-A (20, 21)

This report shows the ten main group-A's which are used to monitor sales of all drinks, all snacks, all daily goods, etc. Each main group-A consists of linked group-A's.

```
X-20
  17          MAIN GP-01
                  16.85
         32.692%
              :
TOTAL
                 119.15
```

main group-A quantity, descriptor
main group-A amount
sales % (printed by [SF-27.e])

total amount

Main Group-A Quantity

The quantity is calculated either by stock rate or by item quantity ([SF-68.c]).

Sales %

Each group's % of total sales is calculated either by quantity of items sold or by sales amount ([SF-27.h]). A positive sales % is calculated from the total positive sales and a negative sales % is calculated from the total negative sales.

GROUP-A PER MAIN GROUP-A (22, 23)

This report shows the linked group-A's per main group-A.

```
X-22
MG 01   MAIN GP-01
  17        GROUP-A-01
                16.85
        100     %
TOTAL
                16.85
-----------------------
             :
ALTTL
                119.15
```

main group-A number, descriptor
linked group-A quantity, descriptor
linked group-A amount
sales % per main group-A (printed by [SF-27.e])

total amount per main group-A

total amount of all Main Group-As

Linked Group-A Quantity

The quantity is calculated either by stock rate or by item quantity ([SF-68.c]).

GROUP-A (25, 26) / GROUP-B (30, 31)

```
X-25
  17        GROUP-A-01
                16.85
      MAIN GP-01
         32.692%
              :
TOTAL
                119.15
```

group quantity, descriptor
group amount
link main group-A descriptor (only for group-A)
sales % (printed by [SF-27.e])

total amount of all groups

Group-A or B Quantity

Only Group-A quantity is calculated either by stock rate or by item quantity ([SF-68.c]). Group-B quantity is always calculated by item quantity.

Group-A or B Amount

Group-A/B amount is calculated as:

total PLU amount linked to each group-A/B
%, (+), (-) amount on item ([SF-29.e])
+) VAT tax amount

GROUP-A STOCK (27)

This report shows the total stock of PLUs which are linked to group-A. The stock is calculated either by item quantity or calculated quantity using stock rate by [SF-68.c].

```
X-27
GROUP-A-01
            15.5
GROUP-A-02
             7.5
```

group-A descriptor
total stock of PLUs linked to group-A
(even if the stock is calculated by a stock rate, stock unit name is not printed)

PLU (40, 41)

```
X-40
P--------------1#
     PLU-NAME 000000001
            GROUP-A-01
   16             16.00
    1               .85
   --------------------
   17             16.85
   17.0  kg
          :
TOTAL
                119.15
```

PLU code
PLU descriptor
link group-A descriptor
1st price PLU quantity, amount
2nd price PLU quantity, amount
total of 1st & 2nd prices PLU quantity, amount
sales quantity calculated by stock rate (printed if PLU has a stock rate), stock unit name is printed by [SF-6.a]
all PLUs' total amount

```
X-40
P--------------1#
     PLU-NAME 000000001
            GROUP-A-01
    1              1.00
          :
```

Only 1st price sales is printed when sales at 2nd price is 0 by [SF-8.b=1]

PLU Amount

PLU amounts include or do not include the discount, plus and % amounts on item ([SF-29.e]). Discount, plus and % amounts on subtotal and adjustment amounts are never included in the PLU amounts.

Sales Quantity Calculated by Stock Rate

This quantity is calculated by each PLU's stock rate ([SF-68.c]). For example, if the stock rate is "0.2 (litter)" and the sold quantity is 3, the sales quantity will be 0.6 (litter).

PLU STOCK (42)

This report shows the stocks of PLU that remain. The stock is calculated either by item quantity or calculated quantity using stock rate ([SF-68.c]).

```
X-42
P--------------1#
     PLU-NAME 000000001
             17.0  kg
```

PLU code
PLU descriptor
stock (calculated by item quantity or by stock rate), stock unit name is printed by [SF-6.a]

NON-ACTIVE PLU (43, 44)

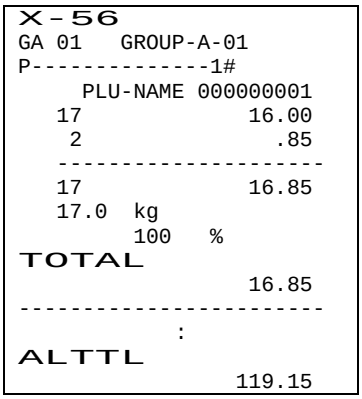
This report shows PLU items (PLU code and descriptor) that have not been sold.

MENU 1 ~ 3 PLU (50 ~ 55)

These reports show sales data for PLU assigned to each menu on the keyboard. The report contents are the same as PLU report.

GROUP-A PLU (56, 57) / GROUP-B PLU (58, 59)

This report shows the consolidated PLU sales data of items which are linked to a group-A or a group-B. The report contents are almost the same as PLU report.



Each group descriptor
PLU code (linked to group-A or B)
PLU descriptor
1st price PLU quantity, amount
2nd price PLU quantity, amount

total of 1st & 2nd prices PLU quantity, amount
sales quantity calculated by stock rate ([SF-68.c])
sales % per group (printed by [SF-27.f])

total amount per group

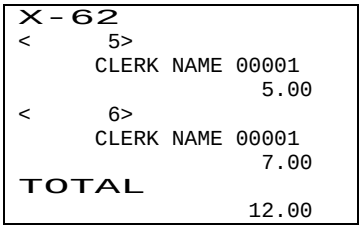
all group's total amount

TRACK TOTAL (60)

Shows the total balance amount of all tracks that have been closed by **NEW BAL.** key. When tracks are closed by a media key, the data is updated by subtracting the track amounts from the total.

TRACK (62)

Shows each track amount that has been closed by **NEW BAL.** key.

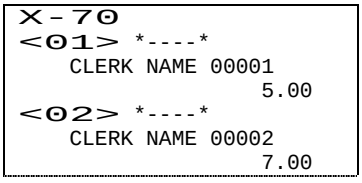


< track number >
assigned clerk name
balance due

total balance due of all tracks

CLERK BALANCE (70)

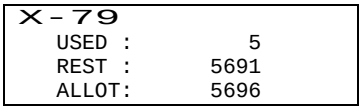
Shows each clerk balance that has been stored under the clerk interrupt system.



< clerk sequential number >, * table number *
clerk name
balance due in the clerk memory

ESF (79)

Each journal data is memorized in the ECR's ESF (Electronic Store & Forward) memory when [SF-78.a] is set to 1. This report shows the ESF status.



number of used records
number of remaining records
total number of records

IX. WARNING MESSAGES

The messages are displayed showing on abbreviation followed by a warning number.

EE-xx	SYSTEM **E**RROR	uE-xx	**U**NALLOABLE OPERATION
dE-xx	INPUT **D**ATA ERROR	LE-xx	**L**IMIT ERROR
IE-xx	**I**NPUT COMPULSORY	cE-xx	**C**OMMUICATION ERROR
PE-xx	**P**APER CONDITION	qE-xx	CONFIRM **Q**UESTION

EE-00	System error: Require a initial reset.
EE-01	Printer error: Disconnect AC cord and then back on or check the printer.
dE-02	Input figure over limitation: Press **CL** key. (PLU HALO can be omitted temporarily by using **HALO RELEASE** key.)
IE-03	Clerk is not signed on.
IE-04	Item/Media (slip) validation is compulsory: Print item or media validation by **MISC. VALID** key. (omitted temporarily by **OFF COMPULSORY** key)
IE-05	Total (slip) validation is compulsory: Print total validation by **TTL. VALID** key. (omitted temporarily by **OFF COMPULSORY** key)
PE-06	Validation paper has not been inserted. (displayed by [SF-10.c=1])
PE-07	Validation paper has not been removed. (displayed by [SF-10.c=1])
IE-08	Message input is compulsory. (omitted temporarily by **OFF COMPULSORY** key)
IE-09	Perform foreign currency subtotal display operation: Press **F.C. SBTL** key and **F.C. MEDIA** key.
IE-10	Number of persons input is compulsory. (omitted temporarily by **OFF COMPULSORY** key)
IE-11	**SBTL** key depression is compulsory before tendered amount input. (omitted temporarily by **OFF COMPULSORY** key)
uE-12	Tax table is not preset: Enter a tax amount manually. Preset tax table.
IE-13	Tendered amount input is compulsory. (omitted temporarily by **OFF COMPULSORY** key)
uE-14	Drawer is open: This message is displayed only when the 'drawer open sensor' is being used.
IE-15	Cash declaration is compulsory. (omitted temporarily by **OFF COMPULSORY** key)
LE-16	Registration buffer is almost full: Prepare to close the transaction.
LE-17	PLU stock is zero or negative (displayed by [SF-17.h=1]): Enter stock by programming. (omitted temporarily by **HALO RELEASE** key)
PE-18	Journal paper near end (displayed by [SF-2.e=1]): Replace with new paper roll. (only at the beginning of transaction, it can be released temporarily by using **OFF COMPULSORY** key)
cE-19	ECR to ECR RAM data transfer error: Check the cable connection between ECR & ECR. Refer to the INTERFACES & PERIPHERALS MANUAL for details.
20	NOT USED
PE-21	Slip printer is busy: Press **CL** key and wait for the printer to be available. Press 'PRINT' on the printer to proceed with the slip.
uE-22	Short tendering amount input of TTL 5 prohibited
PE-23	Receipt paper end: While the paper is replaced, only **RPF** key can be pressed. Press **X2** key to start printing.
24~27	NOT USED
uE-28	Simple condiment PLU entry prohibited: Main PLU not entered yet.
IE-29	Simple condiment PLU input compulsory. (omitted temporarily by **OFF COMPULSORY** key)
dE-30	PLU not found: Enter correct PLU code or program the PLU code.

IE-31	Check-out bill issue compulsory: Press **CHECK-OUT BILL** key. (canceled by using **BILL CANCEL** key)
PE-32	Slip paper has not been inserted.
LE-33	Current track/clerk interrupt memory is full: Close the track or the clerk's transaction temporarily **by NEW BAL.** key or close it by a media key.
34	NOT USED
IE-35	New balance closing is compulsory. (omitted temporarily by **OFF COMPULSORY** key)
uE-36	New balance closing is prohibited.
IE-37	Track # input is compulsory. (omitted temporarily by **OFF COMPULSORY** key)
IE-38	Table # input is compulsory. (omitted temporarily by **OFF COMPULSORY** key)
IE-39	Cooking message input is compulsory. (omitted temporarily by **OFF COMPULSORY** key)
uE-40	Track transfer is prohibited.
dE-41	Track # is not correct.
IE-42	Slip print is compulsory. (omitted temporarily by **OFF COMPULSORY** key)
dE-43	Clerk ID error: The clerk was not assigned to the track in registration. Enter correct clerk code or use the correct clerk key.
IE-44	Subtotal bill issue is compulsory. (omitted by **BILL CANCEL** key)
qE-45	Are you sure to execute transaction void?
uE-46	Clerk's transaction is stored. (displayed when Z report or program sequence is performed in the middle of transaction)
47	NOT USED
dE-48	PLU code check digit error: Enter correct PLU code.
dE-49	PLU code price check digit error of in-store marking code: Enter correct PLU code.
50~52	NOT USED
uE-53	This PLU is not programmed as a master PLU for Not Found PLU entry
uE-54	Not Found PLU has not been entered
55~62	NOT USED
dE-63	Preparations for Euro conversion not completed. ([SF-54.e=1], PGM-397, PGM-101) Refer to the separate document "How to Switch to Euro Currency System 2002" (Euro2002-5402.doc).
dE-64	Entered numbers for Euro conversion sequence is not correct. Refer to the separate document "How to Switch to Euro Currency System 2002" (Euro2002-5402.doc).
cE-65	Scanner communication error
66	NOT USED
cE-67	Channel C communication error
cE-68	Channel D communication error
LE-69	Buffer for journal data transfer is full.
cE-70	IRC line (RS485) is busy.
cE-71	Kitchen printer 1 error: Confirm the setting of the printers. Refer to the INTERFACES & PERIPHERALS MANUAL for details.
cE-72	Kitchen printer 2 error: Confirm the setting of the printers. Refer to the INTERFACES & PERIPHERALS MANUAL for details.
cE-73	Kitchen printer 3 error: Confirm the setting of the printers. Refer to the INTERFACES & PERIPHERALS MANUAL for details.
cE-74	Kitchen printer 4 error: Confirm the setting of the printers. Refer to the INTERFACES & PERIPHERALS MANUAL for details.
cE-75	Slip printer TP-620 error: Confirm the setting of the TP-620. Refer to the INTERFACES & PERIPHERALS MANUAL for details.

76~79	NOT USED
LE-80	ESF memory is full.
cE-81	ECR is in communication with EFT terminal.
cE-82	EFT terminal communication error: Press **CL** key.
cE-83	Card data aborted by EFT terminal or ECR.
IE-84	Enter voucher number printed on a receipt of EFT terminal.
cE-85	EFT terminal is out of order.
cE-86	Communication time out
EE-99	It indicates that ECR data might be collapsed because of a low battery condition by battery discharge while ECR is in stock for a long period. Perform Physical RAM Test and Auto Preset, then leave ECR ON for minimum of 3 hours for battery charge.

MISCELLANEOUS MESSAGES

---- Ir ----	"Initial Reset" operation accepted
--Pc conn---	In PC batch communication
Pc con Error	PC batch communication error
-- Pc- In --	Transferring RAM data to peripheral (RAM data transfer)
-- Pc-out --	Receiving RAM data from peripheral (RAM data transfer)

ADDITIONAL INDICATION FOR ESF

When the ESF memory is near full (5001 records out of 5696), the 2nd and 3rd MENU lamps will flash.

The ESF memory near full condition can be cleared by issuing the Z-79 report with data print by [SF-78.c], by taking Z-8879 by PC (from Tensai2000), or by taking Z-79 report by PC batch communication.

If the ESF memory becomes full, the data first stored, i.e. data at the beginning of the ESF memory area, will be deleted from the ESF memory and the 2nd and 3rd MENU will flash continuously (only when [SF-78.b=0] is selected).

IRC MESSAGES

Following messages are displayed on the master ECR or the slave ECRs in the IRC communication. Even when the ECR is in the OFF position, these messages are displayed.

Displayed on Slave ECR	
-IRC CONN-NN	Displayed when a slave ECR is in IRC communication. Block number NN shows the received/sent data from/to the master.
Displayed on Master ECR	
###P-××××	Displayed when master ECR is in IRC communication of report collection (X, Z) or program (P) download. ×××× shows report number or program number. ### shows a slave ECR number.
--IRC BUSY--	Displayed when a slave ECR is in another IRC communication, or when the communication line is being used by another ECR for slip printer transmission, etc.
###P-×××× E1	Displayed when a slave ### is in a busy condition while the master sends a program data.
###P-×××× E2	Displayed when the power is 'off' on a slave ###, or when the communication line is used for a PC communication, or the cable being disconnected while the master sends a program data.
=### BUSY	Displayed when a slave ### is processing a transaction, or when a transaction is closed but some compulsory conditions still remain.
=###Error	Displayed when a slave ### is error (cannot communicate), or when the power is 'off' or the cable being disconnected.

POWER OFF (AC CORD DISCONNECTED) / BUSY / COMMUNICATION ERROR AT SLAVE ECR

For an X-report data, the master ECR prints consolidated X report skipping power off or busy slave ECR. See the IRC status which is printed at the end of the report for non-consolidated slave ECRs.

When collecting a Z-report data and one or more of the slave ECRs are not ready, the master ECR displays the slave ECR status as shown above (IRC busy, E1, E2). Re-attempt to collect the slave's report or skip it.

TTL 5 key for re-attempt	In order to include an ECR's data on the Z-report, close the transaction in process in that particular slave, or turn its power on and then press **TTL 5** key on the master ECR.
CL key for skip	If you do not wish an ECR's data on the report, press the CL key and the master will skip that slave ECR. Master resumes data collection for the next ECR in the system.

POWER OFF (AC CORD DISCONNECTED) AT MASTER ECR

If the power fails when collecting X-report data, the master prints consolidated X report when the power returns. See the IRC status which is printed at the end of the report for non-consolidated slave ECRs.

If the power fails when collecting Z-report data, the master ECR displays the machine number of the slave ECR when the power returns. Press **CL** key to skip or press **TTL 5** key to re-attempt.